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AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

SEPTEMBER 1, 1941

Juniperus Chinensis Columnaris

Plants and Camouflage
Designed to Draw Customers
Lawn Grasses for South
Close of Southern Convention

AMERICAN NURSERYMAN

F. R. KILNER, Editor

Editorial

CAMOUFLAGE.

Figures compiled by the American Association of Nurserymen indicated that, generally speaking, ample supplies of nursery stock which might be used for camouflage purposes are available in this country. The information is in the hands of the War Department, and its engineer corps is formulating the plans for such camouflage as may be considered necessary or advisable. The program is necessarily a contingent one, depending upon the war situation and this country's place in it.

Aside from the prospect it may possibly afford as a market for nursery stock, camouflage is an interesting phase of military activity. The combination of the two lends exceptional interest to the leading article in this issue, by a man who has had some training in camouflage from a military point of view and is likewise engaged in the nursery profession. It should be borne in mind that under current rapidly changing circumstances, statements made are general rather than literal, and predictions are of probabilities, not certainties.

CONDIMENT PLANTS.

Following the publication of the circular on medicinal plants mentioned on this page in the preceding issue, the bureau of plant industry of the United States Department of Agriculture recently issued a mimeographed bulletin of twenty-eight pages on condiment plants, prepared by D. M. Crooks and A. F. Sievers. As in the case of drug plants, the United States has been almost entirely dependent on foreign countries for spices and condiments for seasoning foods. The shortages of imports due to the war abroad have occasioned much interest in the production of the plants in this country.

Some species of tropical origin come from trees, large shrubs or vines that require at least several years to come into bearing, and these could not feasibly be produced to meet the current shortage. These are cloves, cinnamon, black pepper, allspice, vanilla, nutmeg and mace.

Other condiments are derived from plants native or cultivated in the temperate regions and, since they are mostly herbaceous annuals or perennials, they can be brought into production rather quickly. Some have already been produced in this country, either in limited or adequate amounts.

Since condiment plants are specialty crops involving diverse methods of handling, each crop must be considered with regard to its individual problems. Directions regarding sixteen of these condiment crops are given in detail in the circular.

The Mirror of the Trade

FOR THE TRADE ONLY.

Every effort is made to confine the circulation of the American Nurseryman to those engaged in the nursery trade or in allied commercial or professional lines. Consequently, every new subscription application is checked against available trade records. If no record is found, and the subscription application does not come on printed stationery that indicates a trade connection, the remittance is returned, with a request that the necessary information be supplied if the applicant is in the trade. Since no reply is received in ninety per cent of the cases in which a remittance is returned, it is obvious that this method is effective in keeping the magazine out of the hands of retail buyers.

But there is no intention to decline subscriptions from nursery employees. In fact, most nurserymen encourage their employees to read the magazine for the information it contains which will make them better informed and more efficient workmen. In some cases additional subscriptions are entered for superintendents, foremen and other employees. If remittances have been returned to any of the latter who sought to subscribe direct, it is only necessary to point out that they failed to state the fact that they were nursery employees and to give the name of the employer.

Much effort is spent in obtaining for this magazine information which will be of most benefit to those in the various branches of the nursery trade, and within that limit it should be made of the most possible use.

BURLAP PRICES FIXED.

Burlap prices, which have doubled in the past year, were the subject of an order by the federal office of price administration and civilian supply August 17. The ceiling price on burlap was set twenty per cent below the current market levels of that date.

From a level of 6.5 cents in August, 1940, the New York price of 10-ounce 40-inch burlap rose to 14.2 cents and in the same period the 7½-ounce 40-inch cloth advanced from 4.8 to 10.75 cents.

Because agricultural users of burlap account for eighty-six per cent of the total consumption, Leon Henderson, price control administrator, felt it necessary to take action. The rise in the price of burlap, which is largely imported from India, is attributed to a shortage in shipping space.

The burlap purchased by nurserymen is used material, obtained through secondhand dealers, and what effect the ceiling on imported burlap prices will have on the used material market is not yet apparent.

THE July issue of the Brooklyn Botanic Garden Record lists the 220 species and varieties in the collection of lilacs, including comments on classification, cultivation and pathology.

PRICES and income received by farmers will average about twenty per cent above 1940, because of the expansion in domestic demand, according to the United States Department of Agriculture.

R. P. WHITE, A. A. N. executive secretary, spent the third week of August at Northwestern University, Evanston, Ill., attending the annual short course for trade association executives there.

THE American Institute of Park Executives will hold its annual convention at New Orleans, La., October 6 to 9, at the Roosevelt hotel. Exhibits of equipment and devices for park improvement will be set up in city park.

AMERICAN NURSERYMAN

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NOW IS THE TIME TO MOVE STOCK

(1) Demand will be strong for autumn and spring sales and prices are firm.

(2) Transportation will be adequate this autumn—railroads may be congested next spring.

(3) Surplus of cash in the bank is always better than a surplus of stock in the field.

Make sales now through the American Nurseryman.

Use display space for general line or an extended list of items, at $20.00 per column, $60.00 per page (term rates on request.)

Use classified liners, as on page 32, for prices on items in limited quantity, at low price of 20 cents per line (about 6 words to line); minimum order, $1.00.

Plants and Camouflage

By E. Dexter Davis

Having participated in the course on modern camouflage given by Captain Rodyenko at the Institute of Agriculture, Farmingdale, N. Y., last winter, and from his nursery experience working on the subject as it deals with plants, E. Dexter Davis is able to point out the possibilities of camouflage as a means whereby nurserymen may participate in our national defense program.

Camouflage is the art of misleading enemy observation. Hostile observation may be from the ground or from the air. Ground observation was formerly the only type to guard against and is still important during actual combat. With the development of aerial equipment, most of the observation which must precede, and guide, combat orders is from the air.

Direct, or visual observation from the air was extremely valuable in the last war, either from airplanes or balloons. Today, however, the human observer is not enough. If his ship flies low enough for him to see everything without glasses, objects on the ground will pass through his field of vision so quickly as to be difficult to retain; also, he is within range of enemy ground fire. If the observer flies high enough to be safe from anti-aircraft fire, he must use binoculars, which permit only a limited field of vision. In either case, the value of the observation is limited by eyestrain and by the mental attitude of the observer.

Indirect, or photographic observation is both safe and accurate. Aërial photographs may be taken at altitudes of 15,000 feet and will deliver strips of pictures on which will be recorded every object on the ground. Because infra-red and color photography are not yet practical for this work, all objects will be shown in shades of gray. Because the photographic value of any object depends on its light reflecting properties, or surface texture, rather than on color, the texture of objects is much more important than their color.

Careful study of aërial photographs may reveal the object, its shadows, its tracks or signs of its use. Most objects of military value have a regular outline and smooth surfaces that are revealed in aërial photos as areas of uniform texture. The shadows of objects are extremely important as indicators of height and mass. Army practices have frequently called for shadow expectancies of from four to ten times the height of the object. Observation at Babylon, Long Island, during the winter of 1940-1941 showed the longest noon shadow of the year to be twice the height of the object, but in the hour and one-half after sunrise, and the same length of time before sunset, the distinct shadow of any object was from six to thirty times its height. Since the shadows at each end of the day are so greatly elongated, aërial photographers prefer to complete their missions at these times, making successful camouflage more difficult.

The tracks of mobile objects are often readily visible in aërial photos even when invisible from the adjacent ground. These tracks are especially visible in terrain covered with fine textured vegetation, such as grain crops or grass. The tracks are obvious because traffic has depressed certain plants and caused them to reflect light and cast shadows in a different way, giving a changed photographic value. The signs of use of an object which may be evident in aërial photos may be piles of coal or other raw or finished materials, smoke or steam exhaust, railway or highway spurs, or even the blast-marks on vegetation caused by the firing of a field piece.

Any camouflage mission must have constantly in mind the above things to conceal against, and at all times so operate as to mislead enemy observation of the terrain.

Successful camouflage may be achieved through concealment of the object, its shadows, its tracks and the signs of its use, either through confusion of identity, making the object appear to be another, less important one, or by the use of dummies.

The effectiveness of any camouflage installation will depend on the choice of location (forty per cent), the camouflage discipline (twenty-five per cent), the erection of the installation (twenty per cent) and the material used (fifteen per cent).

Where the camoufleur can help in the selection of site for any object, he will be able to utilize to the best advantage all features of the terrain. To do this most effectively, previous aërial reconnaissance should precede all operations. Careful location of the object to the camouflaged will reduce the amount of labor and material needed for effectiveness.

Camouflage discipline consists in the avoidance of unnecessary disturbance of the terrain and in the maintenance of the camouflage installation in good condition at all times. Where it is necessary to form new paths or roads, all traffic may be confined to a single track by means of wires, and the whole disturbed area camouflaged as a unit.

The material used in any installation should produce an effect similar to that of the features of the terrain. Paints, fabrics and plant materials are being effectively used by the belligerents in the European war. Because the dominant features of most non-urban terrains are plants and their shadows, the skillful use of plant materials is of the utmost importance in most camouflage installations.

The use of plant materials for camouflage purposes should be of especial interest to nurserymen today for two reasons. First, with our present unsettled world conditions, every industry is eager to serve to the best of its ability, skills and resources, and our present mechanized military machine offers relatively few openings for plantsmen. Second, since the plants to be used for camouflage purposes need not be "specimen" quality, most nurserymen will welcome the opportunity to move considerable quantities of imperfect plants, even at reduced prices.

What type of plants will be used for camouflage installations? The recent list of material available, as requested by the War Department,

will influence the bids to be released in various parts of the country. The engineer corps, under whose supervision all military camouflage is executed, will not care if the completed jobs are planted with philadelphus, sagebrush or crape myrtle, so long as they blend with the terrain and serve their purposes of concealment or confusion. Nurseries with large inventories may be able to supply camouflage material in considerable quantity if they are located near the site of utilization. It is not likely that camouflage plantings will be purchased at any great distances from their point of use, since the specific variety will be less important than mass effect, and every possible economy, such as the elimination of needless transportation costs, is of national importance. It is unlikely that nurserymen are going to unload quantities of costly shade trees for camouflage missions, because of the high cost per square foot of cover afforded. It is quite probable that shrubs and vines will be of greater value than large deciduous trees with equal foliage duration, which will cost more to install and maintain. Heavy vines growing in pots or tubs will be effective for missions where quick coverage is needed. Certain buildings in England have had their outlines effectively confused by the use of vines, some growing upward from the soil, others growing out and down from the roof, and still more growing in tubs on the walls. In the northeastern states it will be hard to find more durable and adaptable material than Lonicera japonica halliana and Ampelopsis quinquefolia. Conifers will be sure to play an important part in concealment plantings, but in aërial photos they may appear almost black, and their use will be limited to those terrains already containing similar forms. Many plants will be used for camouflage missions where success will be achieved, not through complete concealment of large objects, but through confusion of identity by blurring regular outlines and textures.

The nurserymen will be quick to appreciate the difficulties of maintaining successful camouflage plantings, for if the newly transplanted trees, shrubs and vines are so improperly handled as to cause defoliation, wilting or even stunted foliage, the installation will certainly attract attention from the student of aërial photographs. It is a fact that in recent military maneuvers a certain battery of field pieces was camouflaged with transplanted material. The plants used were indigenous to the terrain, and considerable ingenuity had been used in their arrangement. However, a few days later, when the referees flew over the site, the leaves on the transplanted material had dried just enough to curl the edges, making a distinct light grey blur in the terrain and giving the position away. Every nurseryman knows the underside of all leaves is considerably lighter than the upper surface. The arrangement and maintenance of camouflage plantings is one of the army's many skilled occupations, and one not crowded.

The nursery industry should not expect to receive great and sudden wealth from the sale of living plants for camouflage work, when for six months of the year cut branches will be just as effective as those with roots on them. Likewise, there will be no hurried rush on the part of the War Department or the more conservative of our important industries to erect camouflage installations until we are in a state of war. The reason is obvious when we consider that the foreign agents within our borders could effectively photograph the completed installation during our present lax regulations, mark them as such and send them where they would do the most harm. When we are actually at war such elements will be controlled more ruthlessly than now, and the installations will be erected as soon as there is a possibility of our being attacked by hostile air forces.

For the present, our nurserymen can continue to operate their business as usual and perhaps learn to transplant their material with less visible shock and injury than is often evident on their own landscape plantings. The use of a commercial product particularly designed for this purpose may prove a surprise to those not familiar with it.

IN an accident causing the wreck of his car when a large truck suddenly turned in front of it, August Bosenberg, president of the Somerset Rose Nurseries, New Brunswick, N. J., was seriously injured August 6. Rushed to the hospital at Allentown, he was found to have a skull fracture and concussion of the brain, in addition to minor injuries. He is recovering at home.

NEW PLANT PATENTS.

The following plant patents were issued during August, according to Rummler, Rummler & Davis, Chicago patent lawyers:

No. 480. Rose plant. Phillips H. Roland, assignor to Thomas Roland, Inc., Nahant, Mass. A new and distinct variety of hybrid tea rose plant, characterized as to novelty by its similarity to the Talisman rose except as to the bloom, and as to the bloom by its unusual color combinations in the bud and full-blown stages, substantially as shown and described.

No. 481. Camellia plant. Kosaku Sawada, Crichton, Ala., assignor to Overlook Nurseries, Crichton, Ala. A new and distinct variety of camellia plant, characterized particularly by its vigorous upright, compact, fast growth; long stems, fine foliage, resistance to disease and weather conditions, fine quality for outdoor blooming, ease of propagation, superior keeping qualities, the delicate pink color and finer texture of the flowers and its superiority over other varieties of camellias for cut flower purposes.

No. 482. Rose plant. Jean Gaujard, Feyzin, France, assignor to Jackson & Perkins Co., Newark, N. Y. A new and distinct variety of rose plant, characterized as to novelty by the distinctive unfading yellow color and irregular form of its flowers, with thick, satiny petals; its shiny green foliage, which persists throughout the summer season, and the Garnet brown of its new wood.

No. 483. Rose plant. Walter Irwin Johnston, Portadown, northern Ireland, assignor to Jackson & Perkins Co., Newark, N. Y. A new and distinct variety of hybrid tea rose plant, characterized as to novelty by its tall, narrow, upright habit of growth; the color of the veins in contrast with the background of the under side of the leaves, and the protruding ovaries and peculiar formation of one of the sepals, in combination with the color and size of the flowers in their different stages of development.

No. 484. Rose plant. Wilhelm Kordes, Sparrieshoop in Holstein, Germany, assignor to Jackson & Perkins Co., Newark, N. Y. A new and distinct variety of hybrid polyantha rose plant, characterized as to novelty by its habit of continuous blooming throughout the summer season, the firm and disease-resistant foliage, the unusual color of its flowers and the double petalage thereof, together with the rare wild rose fragrance of the blooms.

No. 485. Rose plant. Roy L. Byrum, Richmond, Ind., assignor to the Joseph H. Hill Co., Richmond, Ind. A new and distinct variety of hybrid tea rose plant, characterized as to novelty by its distinctive dark and leathery foliage, the predominating rose-red color up to the fully opened stage, then changing to rose color in the vivid combination coloring of its flowers, and the large size of flower and number of petals thereof.

RELEASES PATENT RIGHTS.

May 1, 1941, there was recorded at the United States Patent Office, Washington, D. C., the first dedication of plant letters patent to the United States public whereby the Jackson & Perkins Co. granted to the public the right to propagate,

to use and to vend to others the following inventions and discoveries describes in patent No. 62, No. 106, No. 132, No. 138 and No. 153 without any liability under said patents to Jackson & Perkins Co. or its assigns, said dedication to continue during the full term of said patents which were previously owned by them.

The trade names under which rose plants covered by these patents have been propagated and sold in the United States are as follows: No. 62, Governor Alfred E. Smith; No. 106, Princess Van Orange; No. 132, Polar Bear; No. 138, Rheingold, and No. 153, Kismet.

AERO-PROPAGATOR.

The development of a method of propagation of plants without soil or other solid media was discussed with some New Jersey nurserymen at their meeting last January by Dr. P. P. Pirone, research specialist in diseases of ornamentals at the New Jersey agricultural experiment station and, incidentally, secretary of the New Jersey Association of Nurserymen. The method has received widespread notice since a story by the Associated Press was sent out recently. The first description of the method, contributed by Dr. Pirone to the July 18 issue of Science, reads as follows:

"A new method of rooting plant cuttings without sand, peat, soil or other solid media has been under investigation since early January of this year. Based on the principle that cut stems suspended in the very moist atmosphere of a specially constructed box can develop perfectly normal roots, the method has already given promising results.

"The experimental boxes are approximately three feet tall, two feet wide and one foot deep. Each box has a glass front and back; the former is set in grooves so that it can be opened to permit air circulation, and the latter is kept closed, but enables observation of root development and of the moisture content in the back of the box. One-inch square removable shelves, made of ordinary builder's lath, are placed in a horizontal position about halfway in the box. A half-inch opening is left between shelves, and vertical wooden strips are nailed on the sides of the box in front of the shelves to hold the shelves in place. A large piece of sheet rubber, with holes of the size of the cuttings to be inserted, is fitted securely immediately behind the shelves. The rubber functions to confine the moisture in the back of the box where it is most needed and to keep the cuttings in place. A water trough in the upper back part of the box, from which strips of absorbent cloth are suspended, supplies the moisture necessary to maintain the high humidity.

"Successful rooting of a number of popular ornamentals, including achyranthes, begonia, chrysanthemum, coleus, geranium, perennial phlox, ivy and philodendron, was achieved by this method in less than three weeks. Such plants were then successfully transplanted to soil in pots and have continued to develop normally. Dormant hardwood cuttings were placed in similar boxes in late January and early February. Vigorous roots developed in six to eight weeks on Hydrangea grandiflora, Deutzia crenata and Philadelphus coronarius. These plants were also successfully transplanted to soil and have continued to grow normally.

"In all the experimental boxes thus far used, root development was greatest in the vicinity of high moisture content and was either poor or entirely absent in those parts of the boxes where the atmosphere was relatively dry. With improvements in methods of maintaining a saturated atmosphere in the vicinity of the cut stems in the back of the box, this new method promises to be useful not only to commercial growers, but also to the amateur propagator. The special type of box in which the present investigations were conducted is tentatively called the 'Rutgers Aero-propagator.'"

Since that description was published, an improvement has been made in the method of supplying moisture by inserting a fine sprayer in place of the water trough at the top of the box. The moisture is caught in a cheesecloth curtain, so that it drains off at the bottom of the box. Further improvements are anticipated before the procedure is fully developed.

Dr. Pirone Inspects His Aero-propagator.

Coming Events

ON THE CALENDAR.

September 3 and 4, Texas Association of Nurserymen, Stephen F. Austin hotel, Austin.

September 9, Nebraska Association of Nurserymen, annual field day, Marshall's Nurseries, Omaha.

September 19 and 20, American Rose Society, annual meeting, Hotel Raleigh, Washington, D. C.

September 24 and 25, Mississippi Nurserymen's and Florists' Association, Heidelberg hotel, Jackson.

September 24 to 27, California Association of Nurserymen, annual convention, Hilton hotel, Long Beach.

TEXANS TO MEET AT AUSTIN.

The preparations by those who will take part in the program of the Texas Association of Nurserymen, particularly the leaders of the group meetings, are expected to make the event, at the Stephen F. Austin hotel, Austin, September 3 and 4, outstanding in interest.

The representatives of the American Association of Nurserymen on the program will be Edwin J. Stark, president, and J. Frank Sneed, executive committee member for the southwestern region. Many committee reports will be presented to indicate the varied activities of the association. The late afternoon and evening of the first day will be given over to a boat ride and barbecue chicken dinner on shore, so that visitors may enjoy the scenic features of Lake Austin. Important addresses are on the morning program the second day, and final business is to occupy the afternoon. The program in full was published in the August 15 issue.

NUT GROWERS TO MEET.

The thirty-second annual meeting of the Northern Nut Growers' Association will be held, September 4 to 6, at the Hershey Community Inn, Hershey, Pa. The program calls for two days of talks and discussions of nut trees, their crops, uses and culture, concluded at the banquet, at which the president of the association, Dr. A. S. Colby, of the University of Illinois, will present a summary of nut culture investigations in progress at public institutions in the northern United States.

The concluding day will comprise excursions by automobile to the chestnut plantings of C. V. Stein, near Manheim, and to the J. F. Jones Nurseries, at Lancaster, in the morning, and visits to other nut plantings in the afternoon, among them the J. W. Hershey nurseries, at Downingtown.

The event will be saddened by the sudden death of Dr. G. A. Zimmerman, whose obituary appears on another page of this issue, inasmuch as he was to have been the host at this meeting and show his extensive nut tree collections.

Last month appeared the 188-page report of the proceedings of last year's meeting, at Roanoke, Va., containing much valuable information on nuts and nut trees. The secretary is George L. Slate, of the New York agricultural experiment station, Geneva, and the treasurer is D. C. Snyder, of Snyder Bros., nurserymen, Center Point, Ia.

ROSE SOCIETY PROGRAM.

The program for the annual meeting of the American Rose Society, at the Hotel Raleigh, Washington, D. C., September 19 and 20, has been arranged to include visits to two gardens, besides an educational meeting and business sessions. The opening session will be an educational meeting directed by Dr. L. M. Massey, president of the society and pathologist at Cornell University. The program follows:

SEPTEMBER 19, 10:30 A. M.

"Earliest Records of Roses in North America," with slides, by Dr. Charles E. Resser.

"Area Spread of the Wild Rose Species in North America," by Dr. T. M. Little, geneticist, United States Department of Agriculture, Beltsville, Md.

"Better Roses for All Regions of North America," by Dr. J. A. Gamble.

SEPTEMBER 19, 1 P. M.

Visit to Nanjemoy, the garden of Dr. and Mrs. Whitman Cross.

Visit to the garden of Mr. and Mrs. R. L. Ruffner, Alexandria, Va.

SEPTEMBER 19, 8 P. M.

Round table: "Rose Culture in Different Parts of the Country."

Harry L. Daunoy, New Orleans, La., reporting for the gulf states.

Prof. A. G. Smith, Jr., Blacksburg, Va., for the test garden and vicinity in Virginia.

R. S. Hennessey, Hillsboro, Ore., for the northwestern Pacific region.

Dr. G. W. Murphy, Asheville, N. C., for western North Carolina.

Dr. John B. Carson, Philadelphia, for the middle east.

George A. Sweetser, Wellesley Hills, Mass., for New England.

Five-minute talks on rose culture, followed by discussion.

Saturday from 9 a. m. to noon there will be a business session, continued after 1:30 p. m. until business is completed, after which a visit will be made to the show of the Potomac Rose Society at the New National Museum. Dinner at 7 o'clock will be informal, the toastmaster being Richard L. Ruffner, with W. H. Youngman, president of the Potomac Rose Society, giving the welcome; Dr. Massey responding, and the speaker being A. F. Truex, Tulsa, Okla., trustee, American Rose Society.

R. Marion Hatton, Sec'y.

TREE EXPERTS' SOCIETY.

Certified tree experts of New Jersey, whose organization was reported in the August 15 issue, held their second meeting August 20 and made considerable progress with the formation of a constitution, as well as in drawing up a code of ethics and standard practices. The desire of the members is to place their work in the tree preservation field on a high enough plane so that it can be a pattern for others in states which may hereafter pass certified tree expert laws. With this in mind it was decided to call the organization the New Jersey Society of Certified Tree Experts. The word "society" seemed to denote something a little above an association.

A code of ethics was presented by the committee; the question of standard practices will take more time and study. Progress is being made, and something concrete is expected to be ready by the next meeting, October 22.

Philip E. Alden.

CARL MEIBAUM, New Orleans, La., is in the naval reserve, training at Corpus Christi, Tex. His father, C. W. Meibaum, is meanwhile carrying on the former's landscaping business.

W. J. HUGHES, of the Cedar Rapids Nursery Co., Cedar Rapids, Ia., became a grandfather July 16, when a girl, Ruth Ellen, was born to Ralph Hughes, associated with his father in the business.

Designed to Draw Customers

MIMEOGRAPH POST CARDS TO ADVERTISE BY MAIL.

As the general manager of a growing concern, it is my job, among other things, to devise and employ methods of keeping costs down and production up. One of these is advertising, in which I am greatly interested.

Merchandising or advertising through the mails is an old method which is commonly used today. Attractively done, it is effective, but attractive it must be or the busy world of today cannot be troubled to scan it. To be attractive, it must be colorful and well illustrated and that, we all know, is expensive.

However, if such depicting and printing work could be accomplished by the regular employees in the office at minimum cost, how welcome such a plan would be!

Our answer to this riddle has been the mimeograph machine. For more or less experimental reasons we purchased an inexpensive model of this machine, self-feeding, which cost, with an ample outfit of supplies, well under $50. As all business colleges instruct their students in the operation of these machines we had no difficulty in selecting from our personnel a girl to do this work.

As to the method we were to employ from this point, we again resorted to minimum cost in this experimental stage, and it proved so successful that we are continuing on this low-cost scale with satisfactory results each time.

We selected the backs of regular 1-cent stamped postal cards on which to depict our stories, eliminating the additional expenditure of buying card paper and cutting it to proper size and purchasing the stamps separately and putting them on the cards ourselves. In case of smudge or error in reproduction on our cards, our loss on the stamp is one-quarter cent, as the post office refunds three-quarters cent on each unmailed card. Addressing is done in the same minimum work manner as with our catalogues.

For subject matter we chose a list of plants or items that we wished advertised. We laid the plan out for one year, as is done with all our advertising, breaking it up into twelve cards, one for each month. The space on these cards, as we all know, is quite limited; so we cut down the reading matter to a low point, allowing one-third of the card space for illustrations, which we selected from suitable traceable material commonly found in magazines or other printed matter. If suitable sketches were not available in these sources, our landscape architect, who is adept with the drawing pencil, sketched an appropriate subject to go with the item advertised.

With the product presented in this manner, with a humorous or appropriate picture and a minimum of words, the card becomes attractive and the story we wish to tell is clearly discernible at a glance.

We try to vary the setting each month. Using two colors on each card, we interchange these, as we have as many as six colors to work with. The color combinations on a small card seem quite intricate, but are really easily obtainable and provide a big percentage of the attraction we strive to attain on these cards. Of course, these various color combinations seem to involve using many mimeograph cloths, which cost approximately 50 cents each. However, we find that washing these in turpentine and water makes them suitable for use with other colors. Besides color and subject differences, we try to vary the card arrangements and styles to avoid repetition.

The returns from this type of simple advertising we found satisfactory and worthy of continuation. We started off with a small select retail list of several hundred names and intend to double or triple it for another year. This has proved to be an interesting and worthy experiment and doubtless would bring the same satisfactory results to other nurserymen who would care to try it.

Clifford Corliss.

DOOR-TO-DOOR ADS.

As a highly successful means of securing business, H. Floyd Ameele, manager of the Rock-Manor Gardens, Williamson, N. Y., recommends small throw sheets, distributed from door to door by boys anxious to earn spending money. These, he says, in addition to year-around advertisements in the local paper, are cheap and effective.

The specimen that he sends is a 6x6-inch sheet of tough white paper, on one side of which is printed in boldface type an announcement that the Rock-Manor Gardens invite the recipient to visit the display gardens, see the examples there and consult Mr. Ameele in regard to the service offered and the plants on sale. A complimentary clump of iris is offered each visitor.

PICTURE PLANTING.

"The keys to bigger and better nursery sales are in ideas. Picture planting is a more descriptive way to put it."

John Jennings, of the F. & F. Nurseries, Springfield, N. J., enlarging upon his logical approach to nursery selling, continued. "Just thinking about planting is not enough. That brings sales, of a sort, in given numbers of this shrub and that evergreen, to be planted about the grounds and, usually that's the end of the job."

Picture planting is something entirely different. That calls for grounds surveys, studies of the building architecture and preparing colored plans and sketches to visualize the overall effect as well as the use and placing of individual stock. The work always progresses toward a picture in plants or a series of pictures. When the picture finally has been planted there is little, if any, realization by the owner of having thought about specific plants in any given locations. Clearly, this method develops larger contracts and involves more work than the number-of-plants method of selling.

More than fifty years ago, William Flemer, the founder, moved his nurseries to Springfield from Roselle Park, four miles away. A battleground of the American Revolution is the colorful location of the 300-acre nursery. Ideally located, twenty miles from New York, five from Newark and

Elizabeth, N. J., the F. & F. Nurseries sell their stock along the eastern seaboard and maintain a delivery service within a 100-mile radius. The winter staff of thirty persons expands to about ninety during the growing season. Carl H. Flemer, son of the founder, is president, and John Jennings is the secretary-treasurer. Three landscape architects make up the consulting organization and travel throughout the territory.

An attractive 2-acre display garden alongside the offices starts promoting sales to a visitor as soon as he enters the grounds. As a matter of fact, the intelligent promotion of sales is the foremost policy of Mr. Flemer and Mr. Jennings. They didn't say that theirs is the only right way to sell nursery stock, but it is clear that theirs certainly is the right way for them.

An owner hears about picture planting as soon as his job reaches the planning stage. F. & F. Nurseries subscribe to Dodge Reports, the daily building news service, to get detailed information, such as the type, size, construction details and valuations, names and addresses of owners, architects and contractors. They learn about job progress as it occurs, from plans to completion.

Mr. Jennings mails a personalized and individually typed sales letter, promoting picture planting, to an owner as soon as he gets a report that building plans are in progress. Soon after that an architect-consultant calls on the owner to develop and maintain the contact in accordance with the sales possibility of the job. Another personalized letter is sent when the general contract has been awarded. A third letter goes forward some time after work has been started. The fourth letter is timed with the roofing of the job and the final one some time thereafter.

Constructive sales action on the prospect is continued by the architect-consultant until the landscaping has been decided, one way or the other. All reports are filed for future reference, and just before the first planting season after the completion of building work, another letter is sent to each owner whose job was not termed "sold" or "dead." Mr. Jennings said that when a report is finally filed about a job, there is no nursery sales possibility left in it.

An important part of this sales program is the firm's relationship with the architectural profession, both landscape and residential. Over the years this has become a personal relationship, in most cases. Letters to architects reflect this and search out the possibilities where F. & F. Nurseries can help them in their efforts to satisfy clients.

On all the larger jobs, the general contractor is regarded as a factor whose interest in landscaping should be promoted.

In answer to a question about the effect on nursery sales by the marked trend toward smaller homes, Mr. Jennings said that the average private orders are definitely smaller than they were years ago. But his strong selling sense, always active, urged him to stress the consequent added importance of more intense but entirely logical approaches to every prospect that appears, or is getting ready to appear, on the landscaping horizon. He regards his news about market activity as an indispensable aid in finding those prospects.

P. N. ANNAND NAMED CHIEF TO SUCCEED LEE STRONG.

P. N. Annand was named chief and Avery S. Hoyt associate chief of the bureau of entomology and plant quarantine, effective August 16, by Secretary of Agriculture Wickard.

Dr. Annand succeeds Lee A. Strong, who died June 2. He was born at Telluride, Colo., in 1898. He graduated with a B.S. degree in 1920 from Colorado Agricultural College, where he specialized in entomology. He received an M.A. degree in entomology from Leland Stanford University in 1922, and a Ph.D. in zoology and botany from Stanford in 1928. From 1934 until 1937 he was head of the division of cereal and forage insect investigations of the bureau. In 1937 he was appointed research assistant to the chief of the bureau, and in April, 1939, he was named an assistant chief.

Mr. Hoyt also was an assistant chief of the bureau. He was born at San Diego, Cal., September 16, 1888. He graduated with the B.S. degree from Pomona College in 1910. He held various positions under the state department of agriculture of California, becoming director in 1931, in which year he left to become assistant chief of the plant quarantine and control administration of the United States Department of Agriculture, which position he held until the consolidation of that bureau in 1934 with the former bureau of entomology into the present bureau of entomology and plant quarantine.

U. S. D. A. APPOINTMENTS.

Completing forty years of service in the United States Department of Agriculture, H. P. Gould retired July 1 from active duty as head of the division of fruit and vegetable crops and diseases of the bureau of plant industry. He will be succeeded by Dr. John R. Magness.

Dr. Magness is a native of Oregon and a graduate of Oregon State Agricultural College. For two years, 1927 to 1929, he was head of the horticultural department at Washington State College. In September, 1929, he entered the bureau of plant industry in charge of deciduous fruit investigations.

Dr. F. P. Cullinan, who for several years has been in charge of investigations on stone fruits, will succeed Dr. Magness as project leader for all work on deciduous fruits.

July 1 announcement also was made that Dr. Lee M. Hutchins heads the division of forest pathology of the bureau of plant industry. He has been in charge of research on virus diseases of tree fruits.

Since the death of Dr. Haven Metcalf last year, Dr. Carl Hartley has been acting head of the division, handling administration in addition to his important research duties. Now he will devote full time to research.

Outstanding among Dr. Hutchins' research achievements has been his work on the phony disease of peaches. He determined the cause of this disease, developed control methods and organized an eradication campaign in the southeast. In this work he perfected a new technique for studying virus diseases which helped make possible his discovery, in 1932, of the cause of peach mosaic disease and aided later investigations of other new tree diseases.

DAMAGE from a fire last month at the Earl Ferris Nursery, Hampton, Ia., was estimated at $600.

Close of Southern Convention

In his response to the welcome by the mayor of Lexington to the Southern Nurserymen's Association, at the opening session August 13, Henry Homer Chase concluded his witty verses with the lines, "Mighty glad to be here, and we sure will have a time!" He predicted in full truth.

The opening session that morning, as reported in the preceding issue, was on schedule to the minute and full of interest. The afternoon was a rare treat, when some of the famous stock farms and still more famous thoroughbred horses were seen. Then the drive through the Hillenmeyer nurseries revealed large quantities of stock in the varied assortment required for the large landscape business done by the firm, in good shape due to thorough cultivation in spite of the dry weather. In the evening, in the unforgettable setting of the gardens adjoining the Hillenmeyer homes, over 200 persons were entertained at dinner on the lawn, a veritable banquet in itself. By candlelight Louis Hillenmeyer, Sr., briefly told of the beginnings of the century-old firm, showing the apprenticeship certificate issued to Francis Xavier Hillenmeyer, February 20, 1836, by Baumann Bros., Bollwiller, in the department of Haut-rhin, France; his wedding certificate dated four years later, and an invoice for nursery stock purchased October 19, 1840, from Baumann Bros. for shipment to Xavier Hillenmeyer at Savannah, Ga. Further details of the history of this firm were presented in the preceding issue. Henry B. Chase, Huntsville, Ala.; Frank B. Jones, Lexington, and Oliver B. Hobbs, Bridgeport, Ind., paid tribute to the Hillenmeyers in their leadership in the community and in the industry. Still more enjoyment was in store the following evening at the annual banquet, when Eldon S. Dummit, president Optimist International, was sparkling in a witty and entertaining address. Surely everybody "had a time"!

A. A. N. Leaders Speak.

Business was given full attention at morning and afternoon sessions, August 14. Edwin Stark, Louisiana, Mo., president of the American Association of Nurserymen, spoke briefly, mentioning that in 1816 his great-grandfather had moved from Kentucky to Missouri, why he did not know after the preceding day's experience at Lexington.

Richard P. White, A. A. N. executive secretary, followed with some enlightening comments about the national capital of the present day. He touched on the various activities of the Washington office, the work that faces the national association in the period of the emergency and later

Tom Dodd.

of the post-emergency. The importance of a strong national association, he said, could not be underestimated and the larger the membership the greater the results that could be attained.

Some comments on the maintenance and value of a prospect list and its use in getting customers were embodied in the talk by F. R. Kilner, editor of the American Nurseryman.

Making Collections.

The subject of collections was concisely handled by Fred Cooper, of the Lexington Credit Bureau. He emphasized ten points in making effective collections: Obtain a thorough understanding of terms on the part of the customer when the sale is made. Print the terms of sale on statements. Send out statements regularly. Keep collection correspondence impersonal. Do not let salesmen handle collections. Make the job worth while if it is a part-time chore of an office clerk. Use a high type of individual for personal collections. If collection agencies or attorneys are used, employ one locally and check up to find a good one. Use the services of attorneys with judgment and follow up on accounts placed with them. Don't bluff; when you make threats in correspondence, even mild ones, carry them out.

As to collections in the wholesale field, Mr. Cooper said that the limited number of customers made it more necessary to keep accounts current so that those on the books could continue to buy.

He recommended retaining copies of paragraphs from letters that were particularly effective, so that form paragraphs of merit could be used in collection correspondence, rather than attempting to write something fresh each time.

The morning concluded with a talk on the relations of nurserymen and the inspection service by Howard Tilson, Kentucky inspection head.

History of Landscape Architecture.

In the afternoon Hubert B. Owens, instructor in landscape architecture at the University of Georgia, outlined the history of modern landscape architecture. In this country, he said, it is just a century old, dating from the publication of the work of Andrew Jackson Downing in 1841. The first degree course in landscape architecture was established at Harvard University in 1899. Today the number of graduate landscape architects in government service has brought a new problem to nurserymen, which is being largely solved by the employment or association with their organizations of trained landscape designers.

Speaking on "Income and Taxation," Prof. Robert Haun, of the college of commerce at the University of Kentucky, remarked that not only landscape architects, but certified accountants as well, were being drawn into government service in number. He expressed the opinion

that taxes had only begun to rise and probably would be heavier in the years to come, citing the current taxes paid in England for comparison. Inflation, he said, might bring an appearance of prosperity, but actually less net profit in terms of buying power. He cautioned against expansion at this time, urged his hearers not to overborrow and recommended that they watch credits closely.

Hobbs on Water Stick.

Ollie Hobbs, of C. M. Hobbs & Sons, Bridgeport, Ind., just about upset the session, so interesting was his talk and demonstration of the so-called water stick. His ability to handle this age-old device has long been a matter of entertainment to his friends. The past six years it has been intensified as a hobby of his, and the report of his experiments and investigations gave the listeners much to think about. Fortunately, three spots in the room were found which caused the stick to turn in his hands, so that a convincing demonstration was easy. He has devised a metal form from a piece of spring steel, which bobs up and down in the spots where the water stick would turn. While the willow and witch-hazel are most sensitive, he used apple and some other woods. He said any tree might provide the stick except the cucumber tree, Magnolia acuminata.

Reports.

The report of the secretary-treasurer, W. C. Daniels, Charlotte, N. C., showed approximately the same balance as last year, about $400, the income of $500 having been about equal to expenditures.

Tom Dodd reported that the committee to make a collection of color slides or film had done some work and should be continued. Richard P. Jones read the report of John Wight, chairman of the legislative committee, reviewing current problems. E. W. Dabbs reported fifteen new members, most of them obtained by Henry Homer Chase, an associate on the membership committee. W. L. Monroe, for the education committee, thought effective work might be done with the young and the old.

Lee McClain's report on trade barriers was read by his son, Kenneth McClain, a summary of the report presented at the A. A. N. convention in July. W. A. Easterly read the report of the necrology committee. Henry Homer Chase, for the committee on president's address, concurred in the recommendations it presented. C. M. Borg, for the auditing committee, gave the secretary-treasurer a clean bill of health. Harry Nettles read the report of the resolutions committee, especially thanking the Hillenmeyers for their generous entertainment, as well as others who had promoted the success of the convention.

Richard P. Jones, member of the A. A. N. executive committee for the

Louis E. Hillenmeyer, Jr.

southeastern region, read the names of the state membership chairmen appointed. He looked forward to the holding of the 1943 convention in southern territory and recommended that attention be given to a suitable place.

Election of Officers.

For the next meeting place, Mobile, Ala., presented an emphatic invitation and it was as emphatically accepted, the dates being announced as August 12 and 13, 1942.

The election and installation of officers followed, Tom Dodd, Semmes, Ala., moving up to the office of president and M. L. Harkey, Charlotte, N. C., becoming vice-president. Henry M. Boyd, McMinnville, Tenn., was elected chairman of the executive committee. The secretary-treasurer is appointed by the executive committee and W. C. Daniels, Charlotte, N. C., will succeed himself.

At the conclusion of the session, a meeting was held of members in the southern chapter of the American Association of Nurserymen under the chairmanship of C. R. Smith, of Smith Bros. Nursery Co., Concord, Ga. This chapter includes members in those states of the south which do not have individual chapters.

News Notes.

The daughter of Louis Hillenmeyer, Anna Bain, who was married August 13 and whose wedding breakfast was in the gardens where the anniversary banquet was served, is on a Hawaiian honeymoon.

Tom Dodd, new Southern association president, left Tom Dodd, Jr., at home in charge of the nursery, at Semmes, Ala. Steve Dodd is in service at Fort MacPherson. Mrs. Dodd is seriously ill.

Joseph Falt, of the Chase Nursery Co., Chase, Ala., who debarked from the A. A. N. convention cruise to go into service, is with the naval reserve at Yorktown, S. C., learning to lay mines.

Alvin Kidwell, Louisville, will spend two winter months in the Kentucky legislature for the next four years instead of in the nursery, having won the nomination for state senator in the primary August 2, equivalent to election in that state.

MISSISSIPPI DROPS BAR.

Nurserymen are no longer required to secure Mississippi permits nor to file duplicate invoices, announced R. P. Colmer, chief inspector, last month.

At a meeting of the Mississippi state plant board the rule governing the issuance of out-of-state nursery permits was amended to read as follows:

"Any person or firm desiring to ship nursery stock into Mississippi shall file with the state plant board a satisfactory certificate of inspection personally signed by the duly authorized official of the state of origin. A valid nursery certificate tag must be attached to each bundle or other container of nursery stock shipped into Mississippi. Any requirements of the state of origin for the entrance of Mississippi nursery stock must also be satisfied under a reciprocal agreement."

Lawn Grasses for South

By D. C. Sturkie

Better lawn grasses for the south than Bermuda are described by D. C. Sturkie, associate agronomist, Alabama agricultural experiment station, who presented an illustrated talk on this subject at the recent meeting of the Alabama State Nurserymen's and Florists' Association, at Auburn.

The lawn is a desirable setting for a home and should receive as much attention by nurserymen as do shrubs, trees and flowers. Unfortunately in many cases, the lawn is the neglected part of the landscape. I believe you will agree that you never saw a home with an attractive lawn that did not also have shrubs, but you have seen many homes with neither lawns nor shrubs. A home with an attractive lawn is always a potential market for nursery products, but a home with a bare yard is usually a market for brush brooms.

You are familiar with the usual lawn grass in Alabama, Bermuda grass, which is still the old stand-by, since seeds and stolons are usually abundant and easily obtainable. The chief weaknesses of this grass are its susceptibility to frost, its trouble as a pest among flowers and shrubs and its failure to grow in the shade. It is the first grass to die in the fall and the last one to begin growth in the spring. Bermuda will probably be the major lawn grass in Alabama for a long time.

I wish to discuss two more or less new grasses, which I believe will have a prominent place in the landscape developments in the future in Alabama. The first one of these is centipede grass.

Centipede is an introduction from China which has proved to be a valuable addition to our lawn grasses. It is a low-growing creeping grass that is not a pest, as it is easily killed. It has a leaf that is medium in width, being wider than the leaf of Bermuda grass, and is light green in color. It will grow well in the sun and will stand a moderate amount of shade. It begins growth in the spring earlier than does Bermuda grass. It is easily cut and does not require so frequent mowing as does Bermuda, and therefore a lawn does not become weedy. It is well suited to the soils of Alabama and will withstand the climate in any part of the state. Under conditions where little care is given, this is the best lawn grass in Alabama. It is especially well suited for use on school grounds, churchyards and average home grounds where the lawn is likely to be neglected. It will not stand good treatment. If it is well fertilized with nitrogen, it will grow luxuriantly for one year, but in some manner it chokes itself out and most of it will be dead the next year.

Centipede grass is propagated vegetatively. The plants should be carefully set, leaving the leaves uncovered, as it will not grow from underneath the soil as does Bermuda grass.

Another grass that appears to be one of the best lawn grasses is a new introduction, Zoysia Matrella No. 13521. This grass was introduced from the Orient, but I am not sure of the exact place where it was found. This grass should not be confused with Zoysia japonica.

Zoysia Matrella No. 13521 is a dark green, fine-leaved grass that produces a dense mat of growth that feels like a rug. It begins growth in the spring much earlier than does Bermuda and dies much later in the fall. It is the nearest approach to a year-around grass we have found. It will grow in both sun and shade and is the best shade grass we have found for Alabama. This grass reaches a height of three or four inches and grows so dense it will crowd out all other plants. It requires a good fertile soil for best growth. If a person is willing to spend money for fertilizer and care, this is probably the best lawn grass for use in Alabama. There is no danger of this grass becoming a pest, since it is easily killed.

There are no seeds available; therefore, propagation is by vegetative means. The plants should be carefully set about twelve inches apart, care being taken that the leaves are uncovered, as the plants will not grow from underneath the soil. You may use either small clumps of sod or sprigs in propagation. Setting may be done almost any time of the year if water is available to keep the soil wet. Under most conditions, best results are obtained by setting in March or early April or in October.

The chief weakness of this grass is that it grows slowly. Usually about two years are required to get a sod when plants are set twelve inches apart. To help overcome this weakness it is often desirable to plant the lawn to some other plant, after the zoysia is set. This will give a lawn while the zoysia is becoming established. For this purpose Kentucky bluegrass may be used if the grass is set in the fall and common lespedeza or Bermuda grass if it is set in the spring. The zoysia will eventually crowd out these other plants.

Most of the lawns in Alabama need fertilizer. In starting a lawn the area should be thoroughly prepared and five pounds of 6-8-4 fertilizer per hundred square feet worked into the soil. After the grass begins growth, apply one pound of 6-8-4 fertilizer per hundred square feet about once each month during the growing season.

If proper fertilization and care are used, we can have a satisfactory lawn in almost all cases in Alabama. I believe a little more attention to the lawn in landscaping will pay big dividends to the nurserymen in Alabama.

IN attendance at the Ohio nurserymen's summer meeting, at Painesville, were Charles W., Leroy and Clifford Hetz, of the Fairview Evergreen Nurseries, Fairview, Pa. The youngest brother, Neil, has been in service for two months and is at Camp Carrollton, Va. The Hetz brothers will be hosts to the Pennsylvania Nurserymen's Association at its summer meeting next year.

OBITUARY

Paul V. Fortmiller.

Paul V. Fortmiller, secretary-treasurer of Jackson & Perkins Co., Newark, N. Y., died at Cape Vincent, N. Y., of a heart attack, Sunday afternoon, August 17. He had been on a fishing trip to Henderson Harbor with Mrs. Fortmiller and was stricken August 15.

He was born at Newark, May 12, 1891, and spent his lifetime in the western New York area. He was a member of the class of 1913 at the University of Rochester and a member of Delta Kappa Epsilon fraternity. He had been associated with Jackson & Perkins Co. for thirty-two years.

He was active not only in nursery circles, but also in local community affairs. He was a past president of the New York State Nurserymen's Association, president of the New York State Rootstock Cooperative and for many years on the executive board of the American Association of Nurserymen. The offices he held in no way indicate the energy he put into the organizations which he served nor the responsibilities that were assigned to him and which he carried out most efficiently. His judgment and advice were sought by his colleagues in the nursery industry and he did not save himself in his willingness to be of assistance wherever he could.

In Newark he was a past president of the chamber of commerce, a past master of Newark Masonic lodge, a past high priest of Newark chapter, R.A.M., and a member of Newark Elks' lodge and the University Club of Rochester. He served for many years as chairman of the budget committee of the local community chest and was one of the prime movers in the Newark rose festival.

He is survived by his widow, Mrs. Leta Gallup Fortmiller, and two daughters, Lola, 7, and Mary, 4.

It is given to few men to command the respect and good will, and to serve others and his business as intensely and with as good judgment, as did Paul Fortmiller. He possessed a friendly manner that drew men instinctively to him. He commanded respect and attention and inspired confidence in his judgment in any group in which he appeared—a natural leader. He will be sorely missed by his profession, his community and the many friends and acquaintances from coast to coast.

Funeral services were held August 20 at his home, and interment was in the Newark cemetery.

Thomas Edward Steele.

Thomas Edward Steele, of the Pomona Nurseries, Palmyra, N. J., died August 12.

Born at Little Silver, N. J., May 31, 1868, he entered the employ of

Paul V. Fortmiller.

John T. Lovett, nurseryman, at the age of 13. In 1889 he entered the employ of the Pomona Nurseries, founded in 1838 by William Parry. Mr. Steele in 1903 purchased the business, which he continued under the name of Steele's Pomona Nurseries.

In 1927 his son, Harold Lester Steele, became owner and continues the business.

His wife, Irene Morton Steele, passed away July 30, 1929. He is survived by his son, two daughters and two brothers.

George A. Zimmerman.

Dr. George A. Zimmerman, well known to nut growers, died at Harrisburg, Pa., August 15. Dr. Zimmerman was a past president of the Northern Nut Growers' Association and the Pennsylvania Nut Growers' Association. He had a 60-acre tract of trees on his farm near Harrisburg. Although because of ill health he spent his winters in Florida, he was engaged in horticultural work for the United States government.

The Northern Nut Growers' Association had arranged its annual convention for September 4 to 6 at Hershey to permit members to inspect Dr. Zimmerman's experiments to overcome the blight of chestnut trees. Dr. Zimmerman graduated from the University of Maryland school of medicine in 1910 and a year later began his medical practice at Harrisburg, specializing in diseases of the eye, ear, nose and throat.

SUPER-MARKET IN OMAHA.

The Henry Field Seed & Nursery Co., Shenandoah, Ia., has just purchased the assets of the Baldwin-Wycoff Rose Nursery Co., 7110 Dodge street, Omaha, Neb., taking immediate possession and being open for business.

The company plans to make this a different type of retail selling outlet for nursery stock and seeds than has ever been conducted in Omaha. The property now comprises large fields of perennials, shrubs, evergreens and other types of plants, as well as greenhouse and salesroom. Additional plantings will be made and a complete line of all kinds of nursery stock and seeds will be available.

There are over thirty acres in the property, and ten acres of this will be devoted to trial plots of various kinds of hybrid corn, alfalfas, sorghums and other field crops. Clare Larmon, landscape architect, will have charge of the developments and will also do landscape gardening in the city of Omaha.

The Henry Field company previously has operated downtown stores in Omaha, but feels the demand for evergreens and other types of nursery stock will be so great in the coming years that it will be necessary to have more space, and it is adopting the super-market sales idea.

STUART C. SIMPSON, of the Simpson Nursery Co., Monticello, Fla., has purchased a 14-acre estate on the outskirts of the city, to which he and his wife expect to move in autumn.

Save Money and Trouble Later On!

FUMIGATE YOUR SEED FLAT, POTTING AND TOP-DRESSING SOIL **NOW** to KILL MOST WEED SEEDS AND DAMPING-OFF FUNGI

The only restriction on WEEDS in the months ahead will be that which **you** impose. Treating your Seed Flat and Potting Soil **now**, with Larvacide, will kill most weed seeds, along with most nematodes and fungi that cause damping-off and other soil diseases.

DONE THE Larvacide WAY

IT COSTS LESS THAN HALF AS MUCH AS HAND WEEDING

. . . and Remember, labor is likely to be hard to get. Hand weeding costs around 2c per flat. The Larvacide Treatment, for 100 yards or more, costs only about 1c per flat.

Soil is treated in bins, deep frames or piles, application being made at foot levels as soil is built up into reservoir, to be drawn upon during the winter months. Small amounts may be treated effectively in barrels or boxes.

HELPS IMPROVE QUALITY . . . AND INCREASE PRODUCTION

Plants grown in Larvacide-treated soil usually show distinct improvement in root development, as compared to those grown in **un**treated soil. The result is usually a sturdier, more vigorous growth. By eliminating many competitive and disease-causing organisms, the Larvacide Treatment helps improve quality and increase production.

Treatment is made while the soil is still warm, as up to early October in the North—somewhat later in the South.

Interesting and valuable literature on SOIL FUMIGATION THE SIMPLE WAY will be mailed FREE upon request.

The NEW LARVA-JECTOR measures depth and dosage accurately. Operation is semi-automatic.

SELL WEED-FREE TOP-DRESSING SOIL

Customers are likely to flock to the nursery that sells Weed-Free Top-Dressing Soil. **You** can offer it, following the kill of weed seeds by the simple, inexpensive Larvacide Treatment.

Larvacide

Larvacide is a tear gas chemical, shipped in cylinders 25-180 lbs. and 1 lb. bottles, each in safety can, 6 and 12 to wooden case. Stocked in principal cities.

INNIS, SPEIDEN & COMPANY Established 1816 **117 Liberty St., NEW YORK**

CHICAGO • CLEVELAND • CINCINNATI • BOSTON • PHILADELPHIA • OMAHA

LARVACIDE, the ORIGINAL Chlorpicrin Fumigant, is Guaranteed over 99% Pure

Charlie Chestnut

Let's See What's in the Morning Mail

Emil was sitting at his desk as usual at 7 A.M. reading the morning paper and waiting for the mail man. "Wonder whats keeping Gus this morning?" he says to me. "Must be he's got a load of mail order catalogs or else my watch is off." He pulled out his old watch, opened the hunting case and listened to see if it was going.

Emil always gets set at his desk an hour before the mail man is due and starts beefing if the mail man aint there ahead of time. You can always find Emil there with his sheep skin coat unbuttoned, his hunting cap pulled down over one ear and his pipe going. His pruning knife is opened and laying there on the desk ready for action.

"Listen to this, Chas.," he says, as he read from the paper, "10 below yesterday in Charles City and 18 below in North Dakota. Chicago was zero and Miami was 66," he read. The weather report always gets first attention and it is never right, always too cold or too hot. I used to offer some comments on the weather but he never pays any attention to me, so I didnt say anything.

"Here comes Gus," I says. I could see him turning in off the highway.

Gus always brings the mail in and dumps it on Emil's desk with a few comments on politics or the weather. "Morning, Emil. Morning, Chas." he says. "This will keep you busy for a while. Lots of ads and stuff this morning."

"How cold was it at your place this morning, Gus," says Emil.

"At 5 o'clock it was 22 below, Emil. How was it here?"

"Went down to 26 here, Gus," says Emil.

"Why dont you loosen up and get yourself a thermometer that works? That dime store outfit of yours is way off," Gus says. "It was never 26 below in the history of the weather bureau here in Riverbend. As a matter of fact it was about zero last night and then it warmed up after 4 o'clock. Well, so long, Emil."

Gus gave me a wink as he went out. He is always a great guy to kid Emil about the weather. "Old Gus has made such a habit of stretching the truth, he cant even tell you the time of day without adding on a few minutes," Emil grumbled as he started in on the mail.

"The want lists are starting to come in Chas.," Emil says to me. "You can always tell when the cold weather hits. The boys aint got anything to do so they start that dammed nonsense of sending want lists. Heres one from John Bushbottom with everything in the world on it. John dont want nothing. He's just trying to get a line on prices so he can cut under a little."

"Here's an ad, Chas., on a machine to tie asparagus. One of the members was telling me at the convention last summer he made enough on asparagus to go to the convention and had 12 dollars left over. You take that piece there by the railroad, Chas., we could go to work and put in an acre of asparagus and clean up. Make a note, Chas., to get out a want list on asparagus. I got a good notion to specialize on that. With this machine there wouldnt be nothing to it. Lay this circular there in the drawer where I can find it."

"Here Chas., you open this letter from the East and West Nursery. If they are still writing about that $19.00 from last spring, just throw it in the waste basket. I told George at the convention them was single mock oranges he sent me and no double. I told him I wouldnt pay for doubles when I got singles. What do they say, Chas.?"

"Its a inquiry for honeysuckle. Says he needs a couple hundred for one of his agents," I says.

"Cant catch me on that," says Emil. "I'll write and offer to do business for cash, but I aint going to cancel out for them mock orange. Must think I dont know doubles from singles. He cant get away with that stuff with me."

"State prison farms wants willow cuttings and 12 oz of giant radish seeds. Submit bids in quadruplicate and enclose a certified check," it says. "Imagine feeding all them radishes to the prisoners. Never a word about honeysuckles or barberry. Heck with that." That was another letter for the waste basket.

"Chas.," says Emil. "We are going to have more trouble with

FOREST NURSERY CO.

GROWERS AND WHOLESALE DEALERS

Forest and Shade Trees
Ornamental Shrubs
Evergreens and Roses

Mc Minnville, Tenn.

We offer for Fall 1941 and Spring 1942 our usual line of **ORNAMENTAL HARDY SHRUBS, EVERGREENS,** assorted **SHADE AND ORNAMENTAL TREES. TREE SEEDLINGS** in large quantities for reforestation. **NATIVE TREES AND VINES AND CREEPERS** for roadside beautification.

Fall trade list will be ready September 15.
Send your want list for special quotations.

Established 1887
By J. H. H. Boyd

J. R. Boyd
President

GIVE YOUR TREES AN OVERCOAT FOR WINTER

When Autumn breezes whistle to Winter, it's time to think of overcoats for those newly planted trees and shrubs, as well as established evergreens which are subject to burning due to moisture loss.

A thorough spraying with DOWAX* will cover the foliage and bark with a semi-permeable, moisture conserving film which will keep the wood healthy in transplants until the root systems start functioning next Spring. Cut Xmas trees coated with DOWAX have a greatly reduced needle fall. Bulbs such as Dahlia, Gladioli and Canna coated with DOWAX retain their moisture.

DOWAX replaces wrapping on shade trees with the exception of a few thin bark varieties.

DOWAX reduces moisture loss. Prominent landscape organizations the country over use it on their transplants to reduce mortality and increase vigor in their plantings. For full details write today for the DOWAX booklet.

DOWAX

First Aid for Transplants

THE DOW CHEMICAL COMPANY

MIDLAND MICHIGAN

New York St. Louis Chicago Houston

*Trade Mark Reg. U. S. Pat. Off

TRADE DOW MARK

the cemetery in Lake Park. Here is a letter from that outfit. They claim them 6 Arborvitae is as dead as one of their own roomers and they want free replacement right away."

"That dont surprise me, Emil," I says. "Remember I told you at the time they was dead before we dug the stuff, but you said they might come back. They come back on our hands alright," I says.

"Put the letter there in the drawer, Chas. If they write in again I might have to go over," says Emil.

"Thats the second letter already, Emil," I says.

"Then you better send a postal and say I am in Florida for the winter, and I will see them in the spring," Emil says.

"Look at this price list, Chas.," he said as he handed me a home made price list. "Cant even read it. What is he trying to sell? Must think we aint got nothing to do but figure out puzzles. Cant make head or tail out of it, Chas. Here, look at it."

"This is a surplus list of ferns, Emil. Some gent up in the woods wants to do business. He says he will take nursery stock in exchange, shrubs, etc.," I says.

"Send him a postal, Chas., and ask him if he wants to trade for honeysuckle. A lady was asking for ferns last spring. We might get a few calls. In fact, add that to the want list. General assortment of ferns. Mrs. Brewster could be talked into a lot of ferns. Make a note of that, Chas."

"O. K.," I wrote down, "See Mrs. Brewster about ferns."

"Chas.," he says, "here is some-

SURPLUS SPECIALS

Fall Delivery — 1941

	Per 100
Juniperus Communis Depressa Plumosa, 6 to 8 ins., x, frames	$10.00
Juniperus Communis Depressa Plumosa, 8 to 10 ins., xx, frames	16.00
Juniperus Virginiana Globosa, 2-yr. grafts, field	50.00
Juniperus Virginiana Chandler's Blue, 2-yr. grafts, field	50.00
Juniperus Chinensis Mascula, 1-yr. grafts, field	35.00
Juniperus Chinensis Mascula, 2-yr. grafts, field	50.00
Juniperus Chinensis Pyramidalis Green, 2-yr. grafts, field	50.00
Thuja Globosa, 8 to 10 ins., x, field	15.00
Thuja Globosa, 10 to 12 ins., xx, field	18.00
Thuja Globosa, 12 to 15 ins., xx, field	20.00
Taxus Cuspidata Andersonii, 4 to 6 ins., x, frames	10.00
Taxus Cuspidata Andersonii, 6 to 8 ins., x, frames	12.00

Plenty of moisture combined with good soil makes this lining-out stock A-1 for quality. Fine assortment of B&B evergreens.

HOLTON & HUNKEL CO.

Mail Address: P. O. Box 1747 Milwaukee, Wis.

Milwaukee, Wis.

Nursery: Brown Deer, Wis.

thing we could use. Looks good, too. Outfit for spraying paint, whitewash, etc. For chicken houses, barns, outhouses, basements. Wonder if I could get the agency and a sample outfit to demonstrate. Put it in the drawer there, Chas."

"Did you read the back page, Emil?" I says. "Terms Cash. No agents or middleman. Price $65.00."

He took it out of my hand again, give a glance on the back page and tossed it in the waste basket.

"Throw on a little coal, Chas.," Emil says. "Dont put on a lot. We got to go out and take some cuttings this morning so there aint no use to get a big fire up." While I filled the stove, he got his pipe going again and put an edge on his big pruning knife with an oil stone he keeps in his desk.

"Here is a bill from the hardware store, Emil," I says. "They claim they aint going to wait much longer for you to pay that nail bill. If it aint paid by Saturday they are going to turn it over for collection."

"Give it to me, Chas.," he said. On the back of the bill he wrote with his pencil. "Gents: As soon as I get my money in on my government contracts, you will get your money. Dont worry. I aint going to run away. I will pay right after the first."

"What 'first' you talking about, Emil?" I says. "Better put some certain month down."

So he took the bill again and put down "Jan." "That will hold them for a couple of months," he says. "So they wont get excited for a while anyway. Better make out a envelope and mail it back, Chas."

"More bad news," said Emil. "My wifes sister and her 4 kids is coming for Thanksgiving," Emil said as he read the picture post card from Lizzy. "That means I will be sleeping in the greenhouse until Christmas. They are always good for 4 weeks. Last year they was here 3 months when they got the measles one after the other." Emil put the post card in his coat pocket and let out a deep sigh.

"Wonder who this is from?" said Emil as he picked up another letter. "Some lady in Lake Park. Might be a order." Emil adjusted his glasses and then let out a gentle oath of disgust. "Its that St. Marks Ladies Christian Uplift Society again. They want me to donate a door prize for their Christmas festival. Better send a postal. Just say I will give to the bearer one choice honeysuckle, when presented at the nursery next April. Wait a minute, Chas., they got a couple of golden Arborvitae there by the church. I will drive over to see the ladies and clip off some cuttings. Then I can break even on the deal."

"What this, Chas.?" he barked at me when he opened the next one. "Did you order some tickets for the Civic Club Home Talent Show. They sent 4 tickets at 50c each. That outfit is getting altogether too high-handed to suit me. Just send them right back, because I aint going to go and hear old Windy Bowers blow the mouth organ. I can hear him any day for nothing right down to the garage where he hangs out all winter. By the way, they jumped me the other day for 50c at the garage for fixing a tire on the truck last April. They sold me that tire for $2 themselves and it didnt last no time. I told him to forget it otherwise I was thru buying my tires there. If he comes up after a Christmas tree again this year, we can knock off 50c if he mentions it again."

"The day wouldnt be complete without one or two of these letters. Wonder if every nursery gets this stuff too. Listen, Chas., "Gents: For the last three years I have been planting rhubarb and also selling petunias in my spare time. Now I have decided to start a general nursery and I am in the market for all kinds of nursery stuff. Send me your wholesale pricelist. I have wholesale pricelists from all over the country. If it goes good I am going to give up my job in the roundhouse where I am an engine wiper. Yours truly."

"He might turn out to be a big customer, Emil," I says. "Remember you used to drive a milk wagon yourself and sell trees on the side. John Bushbottom claims over 50% of the nurseries are run by somebody on the side. He says they are good customers because they have jobs and have money coming in, which aint true of the general run of the so-called legitimate nurseries."

"Chas., that reminds me of what one of the members told me at the convention. He says he has been printing on his retail catalog for years "Wholesale Catalog." He claims the boys dont know if its wholesale or retail so everybody is satisfied. Make a note of that, Chas. We might try that out and see how it works."

"See what this is, Chas. Letter from the Avenue Nursery in St. Louis. We dont owe them, do we? See what they want. Read it, Chas."

"Lets see, they want to know if the F and M Nursery is good for $50.00 credit. How do they pay their bills, it says."

"Here, Chas., give me that, I will tell them the answer in short order."

HELP WIN THE WAR BY TRADING

We hold the most comprehensive stock of ornamental woody plants of any commercial grower in the temperate regions of the world. Due to war conditions we must reduce our stocks and grow food.

Please ask for our special export catalogue, which lists plants in sizes conforming with U. S. A. import regulations.

If conditions permit we hope to harvest and list a collection of tree and shrub seeds.

HILLIER & SONS, Nurserymen
WINCHESTER, ENGLAND

NEW

BETTER LAWNS

By HOWARD B. SPRAGUE.

Agronomist at the New Jersey agricultural experiment station and professor of agronomy in Rutgers University.

Contains basic and practical information on planting and maintaining lawns — specific directions for soil preparation, fertilization, liming, management practices, renovating poor turf, eradication of weeds and control of insects and diseases.

Special features are: Instructions and sketches for identification of various grasses by leaf and stem characters. Discussion of natural laws affecting growth of grasses, as contrasted to that of flowers and shrubs. Results of recent research on turf problems.

$2.00

For sale by

AMERICAN NURSERYMAN

508 S. Dearborn St., Chicago.

Out come the old stub pencil. "This outfit is good but slow," he wrote. "If you aint in no special hurry, then they are O. K., but dont look for your money before 7 or 8 years." If they are good at reading between the lines, they ought to get the idea that the F and M aint no whirlwind on paying up."

"Riverbend State Bank," Emil read. "I know what that letter is. Just toss it in the second drawer, Chas. I got to get down to the bank and renew that note or else old man Cheater will have a hemorrhage if he aint had it already."

"Here's one, Chas., from a lady in Chicago. She writes: "Riverbend Nurs. Gents: What do you call the enclosed kind of a tree. The agent said it was a Spruce Pine and my neighbor claims its a Coaster Pine. Let me know what it is." Enclosed was a small piece of foliage of Arborvitae. "Just put White Cedar on the bottom of the letter, Chas. and mail it back to the lady," says Emil.

"Outside of a couple of ads on hog mash and poultry feed, I guess that about does it, Chas.," says Emil.

"What about this big envelope from the Washington, D. C. office, Emil?"

"Oh that," says Emil. "You look that over, Chas., I'm going down to shoot some of them rabbits. They are raising the devil with the one yr. apples."

"Better put on your reading glasses, Emil," I said. "Ever since you was down there last week, that old Rhode Island rooster has been missing."

HEAD HOUSTON GROUP.

Paul Teas, vice-president of the Teas Nursery Co., was elected president of the Houston Landscape and Nurserymen's Association at the July meeting of the organization. Other officers are R. C. Suggs, Suggs Landscape Service, vice-president; Frank S. Cornelius, Jr., Cornelius Nurseries, secretary, and Fred Teas, also vice-president of the Teas Nursery Co., treasurer. The Teas brothers are twins.

The directors are G. Bob Head, Griffing Nurseries; Frank S. Cornelius, Sr.; Thomas Bell Foster; Mancill Allen, Mancill Allen Nursery, and J. L. Hearn, Jr., pedologist, Vitalife Plant Foods.

RHODOS—

Tip-Top Stock and None Other

Both collected and nursery-grown. Natives and hybrids. All sizes, and not maybe.

La Bars'

RHODODENDRON NURSERY—FOR 40 YEARS—STROUDSBURG, PENNA.

Just a few items from our 40-page Fall list, dated September 8, of Ornamental Stock and Liners

	Per 100	Per 1000
Juniperus hibernica fastigiata, T 12 to 15 ins.	$15.00	$120.00
Juniperus communis depressa plumosa, T 9 to 12 ins.	14.00	110.00
Juniperus scopulorum, 5 thousand, **$125.00.** S 5 to 10 ins.	3.50	30.00
Juniperus glauca Hetzi. (New, a money-maker.)		
Picea excelsa, T 12 to 15 ins.	7.50	60.00
Picea pungens, 5 thousand, **$100.00.** T 8 to 12 ins.	10.00	90.00
Pinus strobus, 5 thousand, **$175.00.** T 6 to 12 ins.	5.00	40.00
Retinispora decussata (plumosa nana), T 9 to 12 ins.	15.00	125.00
Taxus cuspidata, 5 thousand, **$650.00.** T 8 to 12 ins.	16.50	145.00
Taxus cuspidata, upright, 5 thousand, **$500.00.** T 5 to 8 ins.	12.50	110.00
Thuja occidentalis compacta, T 6 to 10 ins.	14.00	120.00
Tsuga canadensis, T 8 to 12 ins.	15.00	135.00
Ilex crenata rotundifolia, T 6 to 9 ins.	12.50	110.00
Mahonia Aquifolium, T 6 to 9 ins.	6.50	55.00
Castanea mollissima, S 12 to 18 ins.	11.00	90.00
Azalea mollis, 5 thousand, **$175.00.** T 9 to 12 ins.	12.50	105.00
Berberis Thunbergii atropurpurea, 5 thousand, **$115.00.** 2 yr. S 12 to 18 ins.	3.00	25.00
Berberis Thunbergii, upright strain from seed, 5 thousand, **$45.00.** S 6 to 10 ins.	1.50	10.00
Daphne Mezereum, S 4 to 6 ins.	2.50	20.00
Rosa rugosa, 5 thousand, **$50.00.** S 4 to 8 ins.	1.50	11.00
Juniperus Sabina, 18 to 24 ins. B&B.	120.00	.....
Juniperus Pfitzeriana, 18 to 24 ins. B&B.	145.00	.....
Taxus cuspidata, upright, 2½ to 3 ft. B&B.	250.00	.....
Kalmia latifolia, 2 to 2½ ft. B&B.	140.00	.....
Betula alba laciniata (transplanted 1940) 8 to 10 ft.	175.00	.....
Platanus occidentalis, 1½ to 2-in. cal.	175.00	.....
Berberis Thunbergii, 2 to 2½ ft.	12.00	100.00
Berberis Thunbergii atropurpurea, 2 to 2½ ft.	14.50	125.00
Spirea Vanhouttei, 3 to 4 ft.	12.50	110.00
Euonymus radicans coloratus, 12 to 18 ins.	12.00	100.00

If you are not on our mailing list, write for a copy of our catalogue.

FAIRVIEW EVERGREEN NURSERIES
Fairview, Erie Co., Pa.

The president is the third generation of the Teas family, which has been in the nursery business for ninety-eight years. The first Teas Nursery Co. was established by John C. Teas in Indiana in 1843. Later it was moved to Carthage, Mo. Edward Teas, son of John C. Teas, moved to Joplin, Mo., where he conducted a florists' business in conjunction with the nursery. In 1908 Edward Teas, now president of the Teas Nursery Co., went to Houston to establish a nursery. In 1910 he moved his family to the present location, on Bellaire boulevard. He is still active, having attended the A. A. N. convention and contributed an interesting report of it to the August issue of the Gulf Coast Gardener.

MEMBERS of the New England Nurserymen's Association met at the Boulevard Nurseries, Newport, R. I., August 27, to inspect the plantings, hold a short business session and enjoy a clambake, provided by Charles Kempenaar, of Kempenaar & Christenson, proprietors of the nurseries.

This Business of Ours

Reflections on the Progress and Problems of Nurserymen

By Ernest Hemming

THE TEST OF TIME.

The only test of a landscape job, as with any work of art, is how it stands the ravages of time. It is not often that we are given the opportunity to see our plantings after a period of years without the benefit of any changes or adjustments. However, such a circumstance arose just recently and, if you will pardon the personal pride, merited comment.

About fifteen or sixteen years ago, a couple of moderate means built a low rambling white house along one of the inlets of the Chesapeake bay. It was not an elaborate place, the owner having just retired, but it was an attractive place. We landscaped it as soon as construction was completed, with the exception of some good medium-size shade trees that were already on the place. Within a year after its completion the owner died, apparently leaving his widow with investments that did not stand the crash, so that her home was her only asset. This property was just sold June 1 of this year, and over all those years the only care given was irregular mowing of the lawn and casual hoeing of the weeds. The walks were edged with dwarf boxwood, and some years ago every other plant was removed and sold to obtain a little cash; other than that there were no adjustments in the planting. When the new owner called us in to go over the planting and prune out the deadwood and shape up the plants, he said, "Don't shorten them much. I bought this place because I liked the trees and the planting."

Some of the plants had grown perhaps a little large, but most of them had stayed within bounds. The original arrangement was intact; we had a serious drought in 1930 in this section, and we are sure there was some mortality, but there were no gaping holes, and those somewhat tender plants that suffered from the below-zero weather of 1934 had all come back.

Needless to say, there were not any arbor-vitæs, junipers or retinisporas in the planting. The foundation planting of the house included, besides dwarf boxwood, such plants as tree box, Abelia grandiflora, Lonicera nitida, Mahonia aquifolia, Ligustrum japonicum and Euonymus japonicus (apparently not plagued with the scale when planted in a shady spot), and English ivy and Japanese spurge as ground covers. These broad-leaved evergreen shrubs furnished the body to the planting, but there were also a few flowering shrubs, such as desmodium, Kerria japonica and Spiræas arguta and Vanhouttei, to add a little color. At the service end of the house, larger-flowering shrubs, such as crape myrtle, lilacs, deutzias and mock oranges, were used.

Near the house, dwarf trees such as mimosa, pink dogwood, weeping cherry, flowering crab, American Judas and American holly were used. These were largely used as accents in the semiformal garden that was tied to the house.

This list tells the nurseryman reader what kind of climate we have. The list, of course, would be entirely unsuited to large sections of the country, but that is the type of plantings we must make. With fifteen years' additional experience and the many new and improved plants, the job could easily be done better, but it is at least good enough that we shall not get an order from the new owner unless he extends his gardens. E. H.

STOCK of the Derk K. Ouwerkerk nurseries, Yalesville, Conn., was sold at auction August 20 to make way for the Wilbur L. Cross parkway. As the highway cut through the center of the nursery, it was necessary for the state to acquire the property.

IRISES, POPPIES, HEMEROCALLIS

When you double your money on Wayman's Irises it's only the beginning! A foundation stock of my World-famous Modern Irises will build you a business for life. Your own selection or I will be glad to help you. Send for my wholesale prices and descriptive catalogue of the world's finest varieties illustrating 95 varieties in full color.

If interested, write for 4-color folder listing 69 choice varieties of Poppies, also a separate colored folder listing 90 varieties of Day Lilies.

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1500 VARIETIES IRIS AND PEONIES
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Good assortment — Write for list
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KOSTER COMPANY, INC.
Lining-out Stock
of Top Quality
BRIDGETON, N. J.
Write for catalogue.

JUNIPERUS CHINENSIS COLUMNARIS.

Some doubt exists relative to the correct name of the columnar Chinese juniper, but it is usually listed as Juniperus chinensis columnaris. As usually grown, it forms a narrow columnar shape with short ascending branches and needlelike gray-green leaves. It is one of the best upright forms of this species, attaining a height of from fifteen to twenty-five feet at maturity. A green foliage form is available.

Another similar type, and one often considered slightly superior, is the form listed as Juniperus chinensis columnaris No. 18755. This is a broad columnar form with ascending branches and gray-green foliage. Needlelike leaves predominate. The foliage is slightly coarser in texture than the common form. The No. 18755 type seems to age better than the common form, which is not so satisfactory in the midwest as plants become old.

The culture of the columnar Chinese juniper is not specific. It does best in a well drained soil and is somewhat easier to transplant, when on its own roots, than some of the varieties of Juniperus virginiana. It should be used in sunny exposures where possible, although it will stand partial shade. It is susceptible to red spider and juniper scale, as is true of most junipers. Regular control measures are satisfactory.

Propagation is commonly done by grafting. Seedlings of Juniperus virginiana, the red cedar, are usually used as stock, but seedlings of Juniperus chinensis or cuttings of Juniperus excelsa stricta are felt by many to make superior but more expensive stocks. Since many of the scions will form their own roots when lined out in the nursery, if planted deeply, the stock may not be so important. Further information, however, is needed on the question of suitable stocks for many evergreens.

Uses of the columnar Chinese juniper are as specimens, border and screen planting and at corners and in the angles of the house where they will not interfere with views from the windows. In our locality some of the varieties of Juniperus virginiana or Juniperus chinensis keteleeri are considered superior for most uses and situations.

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Excerpts from a Plantsman's Notebook

By C. W. Wood

More comments on the usefulness, propagation and culture of less common herbaceous perennials that are of interest particularly to the neighborhood grower, tested and studied in recent seasons in the writer's nursery in northern Michigan.

Cerastium Strictum.

(July 12, 1941.) When renovating a shady place in the garden this morning, a seldom-seen spot on the north side of a large group of lilacs where the herbage has been allowed to take care of itself for several years, I came upon a plant that I did not recognize and could not remember ever having planted it there. It had spread out a green carpet, suggesting its value as a ground cover in difficult situations, such a one as it was now occupying. Careful search revealed no label to establish its identity, but finally far back in the shadiest spot one lone flower was found which told me it belonged to the pink family and undoubtedly to the genus cerastium of that group. A search through the indexed notes brought the following to light:

(June 13, 1936.) No doubt most careful gardeners steer away from cerastium, because of the pervasiveness of the few popular kinds. If that is true, they are missing some good and useful garden plants, including C. strictum, a shade-lover that grows in nearly all northern lands. Its uses are limited, to be sure, because it is a spreader, but even so it makes a pretty green carpet for a difficult shady spot. And the cloud of small white flowers on 6-inch stems (perhaps taller in rich soil) for close to two months, commencing in May, gives it special value in those dark corners.

Silene Acaulis.

(July 12, 1941.) A correspondent, while asking for a report on Silene acaulis, says he has read so many conflicting statements on its culture and reaction that he is quite at a loss to know what to do with a batch of seedlings now in flats. Disagreement among the writers on this subject is easily accounted for by two factors, the variableness of the species and the soil and climate of the garden in which it is grown. Its variability is easily understood when its wide range (mountains of Europe and North America, as well as a general distribution in the boreal regions) is remembered, for most plants that have traveled so much have become changed in various ways as they have adapted themselves to their different environments. It is not strange, then, to hear one gardener say the plant is easily grown and blooms profusely and another report ease of culture but few flowers, while still others tell how hard it is to grow. I am convinced that the foundation of these conflicting reports can be traced to the material with which the different experimenters were working. I have, unfortunately, had few floriferous plants out of the scores that I have grown from seeds from the Rocky mountains, New Hampshire, Quebec and Europe, but I readily believe others when they say they have plants that bloom freely, for I have seen solid pink mounds of it in one eastern garden.

A survey of its natural habitats will tell one that it requires cool growing conditions and that, I believe, is one secret of its successful culture. This far north it may be grown in full sun, if it receives the root moisture it craves, but farther south it would no doubt be benefited by shade during the heat of the day. Root moisture it does need, yet good drainage is essential for long life. I have therefore always grown it in a scree mixture, i.e., one made up mostly of sand and gravel, and find that it does well there when its moisture needs are met. Two or three years ago a report in an amateur garden magazine of its successful culture in a mixture of light sandy soil and sifted ashes prompted that experiment, with far better results than I anticipated. To be worth garden space, as I see it, S. acaulis must make a hard low mat of foliage, not stretch up as it does under high living. Then it is worth growing even though it never blooms. Take a mat like that and stud it all over with small, almost stemless, bright pink flowers in late spring and you have a splendid plant. Propagation is by seeds, division of the mats or cuttings in early spring.

Trends.

(July 14, 1941.) When visiting nurseries in different parts of the country, I am struck by the tenacity with which some growers hang on to an idea once they have absorbed it. For instance, I know a man who has

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built up a splendid business catering to large estates. It was a grand outlet for the high-quality material which that grower was capable of producing and would have meant continued growth and prosperity for him if economic conditions had become stabilized at the level on which he started. But these are matters of constant change, requiring close attention to trends (foresight rather than hindsight, in everyday language), if one is to keep one's business moving with the current. In the case mentioned, orders for less than $25 were rare and those of $100 or more were the rule; now all that is gone, for expenses incurred in the upkeep of a garden do not help a bit when income taxes are returned, while those created by maintaining a farm, including a stud of fancy horses, are legitimate expenses in the eyes of the tax collector. As a result, gardens on most of our large estates are going to pot, and nurserymen who have tied themselves to the big-sales bandwagon are mostly headed in the same direction. If much of your business has been in that field, it may pay you to check the trend in your locality.

C. R. ROOT CELEBRATES.

The fiftieth business anniversary of Charles R. Root, owner of the Colorado Seed Co., Denver, Colo., was celebrated August 4 by a surprise banquet given in his honor by the Colorado Association of Seedsmen.

After boyhood experience in the printing business in the east, Mr. Root obtained a job with the Denver Seed Co. in 1891. The Colorado Seed Co. was organized in 1911. Besides doing a local retail business, the firm sells conifer seeds to nurserymen. Mr. Root was on the A. A. N. convention cruise last July, but few suspected this witty, alert man to be 78 years of age. He was born at Cato, N. Y., in 1863. Mrs. Root celebrated with him, as well as their two daughters, Clara and Dorothy.

THE Crossing Nurseries, Trenton, N. J., will shortly have completed a 21x95-foot Lord & Burnham greenhouse. Another house, 18x90 feet, will be erected. A new Lord & Burnham boiler was also installed by C.M. Gronert and his son, the owners, in a waterproof pit.

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Diseases of Trees

Gleanings from the Latest Reports of Scientific Research

By Leo R. Tehon

BROWN ROTS IN WEST.

Since 1923 it has been known that two kinds of brown rot have been damaging stone fruit trees and crops in states along the Pacific coast. In both Oregon and California it was at first apparent that the common American brown rot, which is prevalent in the east and with which the fungus Sclerotinia fructicola is associated, was chiefly responsible for fruit rot trouble and that the western brown rot, with which the fungus Sclerotinia laxa is associated, was the chief cause of blossom and spur blighting and twig cankering.

In 1940 A. W. Evans and C. E. Owens, of the Oregon agricultural experiment station, undertook to evaluate the present importance of these two brown rot diseases in experimental orchards in Oregon, collecting blighted blossoms and rotted fruit from ten orchards in four counties and subjecting the collected material to laboratory tests.

While there was variation from orchard to orchard in the relative prevalence and types of damage done by the two brown rots, the total results obtained by these men indicated a definite change in the general importance of the two diseases. Blighting of blossoms they found to have resulted to the extent of seventy-three per cent from attack by the American brown rot fungus and only to the extent of twenty-seven per cent from attack by the western brown rot fungus. Fruit rot, on the other hand, was due in about equal amounts to each of the two fungi, about fifty-one per cent being American brown rot and about forty-nine per cent western brown rot.

If the belief is correct that the American brown rot fungus has been introduced into the Pacific coast states in comparatively recent years, it would seem that the American brown rot, long prevalent and destructive throughout the east, is rapidly increasing in importance as a cause of all types of brown rot damage in the Pacific region. L. R. T.

TREE DISEASES IN 1940.

Annually, quantities of samples of diseased trees and shrubs are submitted to the federal division of forest pathology for examination and diagnosis. Although these samples may not constitute more than a moderate portion of the total number of samples submitted to experts in various parts of the United States, the fact that they are reported on each year gives them a rather special value as representing an annual cross section of the diseases of trees and shrubs which attract the attention of homeowners.

In 1940, diseased samples were submitted from twenty-seven species of woody plants and from twenty-five states besides Alaska and the District of Columbia. They included such common diseases as cedar apple on Juniperus virginiana from Maryland to Wyoming, maple anthracnose on Acer saccharum from Vermont to Michigan and Virginia, sycamore anthracnose from Maryland to Missouri, oak anthracnose from Maryland to Pennsylvania and elm anthracnose and black leaf spot on American and Chinese elm in Kansas, Tennessee and Mississippi. These diseases, all commonly observed and reported, are for the most part controllable by the application of fungicidal sprays and dusts and by the use of sanitary measures, as has been pointed out in previous issues of the American Nurseryman.

Of special concern were the reports of certain instances of new tree species' being attacked. The verticillium wilt disease was, for the first time, reported on Osage orange. A leaf spot known in France and Italy on Magnolia grandiflorum was reported from Virginia; its cause is a fungus called Hendersonia magnoliæ. Russian olive, used as young trees for the planting of farm hedges in Wyoming, developed basal trunk cankers with excessive gummosis. Consistently, a fungus of the kind known as fusarium was derived from the cankers in the course of laboratory examinations.

Certain Arizona cypress trees growing as ornamentals in Alabama and Texas were subject to a foliage blight which, according to descriptions, gave them a severely scorched appearance. The examination of sample material in the laboratory revealed a fungus tentatively identified as Macrophoma cupressi. This fungus and others similar to it have been reported occasionally in previous years—in 1932 on unidentified cupressus in Florida, in 1935 on Cupressus pyramidalis in Texas and in 1924 on Italian cypress in Georgia—instances which indicate the widespread occurrence of an injurious leaf blight of cupressus in the southern states.

RETURNING the middle of August from a vacation in Wisconsin after the A. A. N. cruise, George F. Verhalen found a large crew harvesting a fine crop of Paper White narcissus bulbs, another crew budding a good-sized block of roses and the fields of the Verhalen Nursery Co., Scottsville, Tex., wholly in shipshape condition. Occasional rains have provided ample soil moisture.

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Taxus cuspidata capitata, 4 to 6 ins. X....	.08
Taxus cuspidata capitata, 6 to 8 ins. X....	.12
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EXAMINE FRUIT TREES FOR TRUENESS TO NAME.

For the past twenty-one years men from the Massachusetts State College have been examining fruit trees in nurseries for trueness to name. This work for the twenty-first year has just been completed. Eighteen nurseries, scattered from New England to Michigan and Virginia, have been examined and all misnamed trees removed or plainly marked. A large proportion of the trees grown in this area are included. Apple, pear, plum and cherry varieties have generally all been examined, but peach varieties have usually only been surveyed and mixtures and many misnamed varieties pointed out. This less exact work is due to the fact that there are many groups of peach varieties which resemble each other so closely that it is impossible to distinguish them with certainty by the nursery trees. Yet many misnamed peach varieties have been discovered.

Most of these eighteen nurseries have been examined annually for from six to nineteen years and one for the entire twenty-one years. It is significant to note the decrease of misnamed trees in these nurseries. In early years hundreds and even thousands of trees were eliminated. Now only a few are cut out. Yet in most nurseries a few new mixtures are found each year. It is true that many new mixtures are from buds cut from bearing trees. Except with peaches, a nurseryman is safer if he sticks to buds from his own nurseries (if it is clear of mixtures) rather than to go periodically to bearing orchards.

Each nurseryman is given a statement showing exactly what has been done in his nursery. This work has been of great value to both nurseryman and fruit growers. Of course, there remains the possibility of mixtures in storage, but the chance of the fruit grower's getting trees untrue to name is greatly decreased and the nurseryman escapes controversies with his customers. The old McIntosh-Wolf River Mixture, the "False-Baldwin"—"False-Gravenstein" and mixtures of varieties of the Winesap group have disappeared from these nurseries, states J. K. Shaw, research professor in pomology at Massachusetts State College, who has been doing this work, together with A. P. French, O. C. Roberts and Lawrence Southwick.

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Answer to Inquiries

OAK ANTHRACNOSE.

I am sending a box of oak twigs and leaves, on which I should like to have your opinion. The tree seems to be affected quite badly throughout the top.

I wish to take this opportunity to say that I have been following Dr. Tehon's articles in the American Nurseryman and think they are an especially instructive series and add greatly to my interest in the publication as a tree man.

C. L. W.—Wis.

The oak samples sent with your inquiry are heavily infected with a disease known as oak anthracnose.

The damage already present on the tree can, of course, not be repaired this season. If weather continues moist and favorable to the development of the disease, it will be desirable as soon as possible to cover the tree with a 4-4-50 Bordeaux mixture containing one-half pound of soybean meal to 100 gallons of spray.

In subsequent years, this spray should be repeated annually just as the leaves are maturing after having emerged from the buds. Also, I should suggest that early next spring you spray the ground immediately under the tree, and also for some distance around the tree, thoroughly with a one per cent solution of Elgetol.

L. R. Tehon.

DISEASE OF CHINESE ELM.

The following is a description of a disease or condition that is proving serious to Chinese elm, Ulmus pumila, in this part of Texas. We should like to receive information in regard to this disease.

The disease first makes appearance on the trunk just below where the branches start. The tender bark turns a brownish color. As the disease spreads it travels down the trunk and is generally accompanied by sap running from crotch scars where limbs have been pruned. We examined several trees; the roots seemed to be in perfect condition, but the trunks were soured from branches to roots. We have never been able to find any insect that could have caused the disease. I have attributed this condition to early freezes in fall or late freezes in the spring when there is considerable flow of sap. The disease does not always kill the trees the first season, but almost always leaves the tree worthless. The bark peels off and leaves the wood bare. B. N.—Tex.

We have had brought to our attention in Illinois nurseries a condition in Chinese elms which, from your description, must be the same as the one you are encountering. It shows up first on transplanted young stock, brought in for planting in the nursery, in rows of young trees shortly after they are set out. As many as eighty per cent sometimes show the trouble, and as you have pointed out, a small percentage die, while the remainder apparently overcome the difficulty and continue for some years to grow more or less satisfactorily. However, at any time the wound is apt to break out again. In our own experimental planting we have had a few of the trees which before we got them had apparently survived such an attack break over in severe wind.

In the cases that have come to our attention, we have never been able successfully to trace the actual time when infection occurs. It has seemed to us, however, that a number of factors might have operated to permit entrance of disease into the base of the trunk. Where small trees, for example, are tied in bundles, the cord around the base of the bundle might chafe spots and give opportunity for entrance of fungi and bacteria. Also, the customary pruning of trees to shape them before they are tied in bundles and placed in storage opens

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Andorra juniper, 18 to 24 ins.	1.40
Pfitzer juniper, 18 to 24 ins.	1.40
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Mugho pine, 12 ins.	1.25
Mugho pine, 15 ins.	1.50

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LINING-OUT STOCK
For Color and Beauty Get Azalea Calendulacea.

Azalea Calendulacea	
12 to 18-in. clumps, 3 br. and up.	$8.00 per 100
18 to 24-in. clumps, 3 br. and up.	12.00 per 100
2 to 3-ft. clumps, heavy br.	20.00 per 100
Cercis Canadensis, Redbud	
12 to 18 ins., seedlings	10.00 per 1000
18 to 24 ins., seedlings	15.00 per 1000
Quercus Alba, White Oak	
12 to 18 ins., seedlings	12.00 per 1000
18 to 24 ins., seedlings	16.00 per 1000
EVERGREENS	Per 1000
Juniperus Virginiana, Red Cedar	
3 to 6 ins., seedlings	$3.00
6 to 12 ins., seedlings	5.00
Hemlock	
2 to 4 ins., seedlings	5.00
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4 to 6 ins., seedlings	6.00
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Wholesale growers of the best
Ornamental Evergreens, Deciduous Trees, Shrubs and Roses.
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Complete assortment of lining-out sizes
Also larger grades for landscaping
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EVERGREEN SPECIALISTS
Largest Growers in America
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J. V. BAILEY NURSERIES
Daytons Bluff Sta. St. Paul, Minn.

BURTON'S
HEADQUARTERS FOR EVERGREEN GRAFTS, TRANSPLANTED EVERGREENS, SHRUB LINERS.
RARE ITEMS YOU DO NOT FIND IN MOST LISTS! *Write!*
HILLTOP NURSERIES
CASSTOWN, OHIO

wounds through which rot-producing organisms could enter, either during storage or after the trees are planted in the field. Then, too, there is a possibility that under storage conditions or during shipment shingle tow or other material used for packing could create conditions ideal for infection by certain types of fungi and bacteria.

As a result of a number of tests we have made, we have found that when the disease is recognized in the nursery row, rather careful surgical work performed on each tree with a knife kept continually sterile with bichloride of mercury will remove the infected material to such an extent that if, after the surgical work is done, the trunk is painted and kept reasonably well painted with thick Bordeaux mixture or with five per cent potassium permanganate, normal healing will take place in most cases.

The disease apparently is not like ordinary diseases of trees, since it seems not to have always a particular fungus associated with it. Most frequently, but not in every case, we have obtained from diseased samples a fungus known as cephalosporium, but we have also had quantities of bacteria, and some of these bacteria when grown in the laboratory produce both acid and gas. Hence we think the trouble is in some respect similar to the internal slime flux sometimes encountered in American elms.

If you should have opportunity to secure one or more of the affected trees and could send them up to us for examination, we should be glad indeed to have them. L. R. Tehon.

ST. LOUIS GROUP FISHES.

Members of the Landscape and Nurserymen's Association of Greater St. Louis were the guests of Mr. and Mrs. Francis Bender at their club house on the Mississippi river at Peruque, Mo., about thirty miles north of St. Louis, for the August meeting. About thirty members, with their families, were given the opportunity to catch fish and enjoy eating them, all at the same time.

The brief business meeting was presided over by Howard E. Ward, and nominations of officers for the ensuing year were made. Election will be held at the September meeting.

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Large Hard Maple
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Mountain Ash Sdlgs.
Rooted Evergreen Cuttings (both potted and bare root)
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Evergreen Grafts
Budded Elm Liners
French Lilac Liners

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Lake City, Minn.

15,000
JUNIPERUS VIRGINIANA
Sheared and root-pruned.

	Each
3 to 4 feet, heavy	$1.00
4 to 5 feet, heavy	1.35

in lots of 100 or more
LINING-OUT STOCK

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EVERGREENS
For Seventy-seven Years Growers of Quality Evergreens
Lining-out Stock a Specialty
Write for Trade List
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Higher labor costs, taxes, etc., will be reflected in higher wholesale and retail prices. You will earn extra profits, if you book your initial requirements early.
Send Want List for Quotations
"One of America's Foremost Nurseries"
E. S. Welch Pres.
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NEW PRONOUNCING DICTIONARY
of Plant Names and Botanical Terms
64 pages, 3000 names, **25c** per copy
AMERICAN NURSERYMAN
508 S. Dearborn St. Chicago, Ill.

ST. PAUL ROSE TRIALS.

Successful wintering of roses at the test gardens in Como park, St. Paul, Minn., is reported. All but one or two varieties came through in excellent condition. In fact, the losses by winterkilling are less than five per cent. One point of interest is the fact that the crown of the plants was in each case set three inches below the surface; consequently, deep planting would appear to be of particular value in planting roses in northern sections.

By mistake, one small bed of Dainty Bess was not covered as were all the others. Considerable misgiving was felt regarding this variety; however, all but two plants started out and are growing well. A border of more than 100 polyantha roses came through without the loss of a single plant. Among a number of hybrid tea roses, Crimson Glory proved unusually hardy—a little hardier than Grenoble, which apparently has a better reputation for hardiness. Dickson's Red and Christopher Stone tied for third place in regard to winter hardiness.

In this section, Etoile de Hollande has been given high hardiness placement as a rule, but at Como park it fell far below the varieties already mentioned. Even Poinsettia, a scarlet, proved itself hardier than Etoile de Hollande. Prince Felix, frequently recommended as the hardiest red, proved itself extremely tender, while the flowers last year had few of the qualities possessed by others in this group.

A number of rugosa roses, hitherto the main stand-by in the Twin Cities area, at least for hardiness, were badly damaged, much more so than was at first suspected. Even Hansa was greatly damaged. This is quite unusual as some growers have recommended this variety for its almost arctic hardiness.

In the foreign group, Schneezwerg, a white hybrid from Lambert of Germany, was untouched and was almost the only one among the rugosa varieties which came through the winter in good condition. It would appear as if this rose deserves to be more widely known and grown. Frank Skinner, Dropmore, Man., has Schneezwerg in his wind-swept section of Canada and considers the variety one with great possibilities for breeding purposes.

At Como park all the large-flowered polyantha roses came through in excellent condition. In this group, World's Fair proved its mettle by starting out in splendid condition, well ahead of several others that have been given a high rating for winter hardiness.

Dedication of the test garden was held June 30, when Mr. and Mrs. W. D. Brownell, Little Compton, R. I., were the guests of honor on the program, Mrs. Brownell giving a talk in the morning on creating new roses and Mr. Brownell delivering the dedicatory address in the afternoon. Their long work in breeding hardy roses meets special interest in that part of the country.

MEET AT LOS ANGELES.

The Southern California Horticultural Institute met August 21 at the Mayfair hotel, Los Angeles, for dinner and a program. Hugh Evans, of Evans & Reeves Nurseries, West Los Angeles, newly elected president, presided. The new officers, Jess Watt, of Armstrong Nurseries, Inc.,

MAHONIA AQUIFOLIUM

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Glossy broad-leaved evergreen foliage, large panicles of yellow flowers followed by large clusters of blue berries. Hardy anywhere in the United States.

1-year seedlings, 3 to 9 inches, row-run..... $20.00 per 1000
2-year seedlings, 9 to 15 inches, row-run..... 30.00 per 1000
(250 at 1000 rate)
Field-grown transplanted stock, 6 to 12 inches..... 10.00 per 100
Field-grown twice-transplanted stock, several stems, 12 to 15 inches..... 20.00 per 100

BUSHY SPECIMEN PLANTS { 15 to 18 inches, B&B; 18 to 24 inches, B&B; 24 to 30 inches, B&B; 30 to 36 inches, B&B

Order now for fall 1941 or spring 1942 delivery. Shipments made to any point in the United States with no packing charge. We specialize in growing Mahonia. Wholesale Price List of General Nursery Stock Sent on Request.

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SHERWOOD NURSERY CO.
EVERGREENS :-: Propagators & Growers
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Large quantities of lining-out stock in evergreens for fall 1941 and spring 1942 delivery. Write early for quotations. Remember there is no packing charge, and we pay shipping costs on lining-out stock to any point in the United States. 25% of the purchase price reserves stock for future delivery on any order.
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Small fruits

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97 acres of them, a complete assortment, well cared for, young shrubs, the best to be had. Write for Catalogue.

Again, this year

NO ROSES

We are sorry (in fact glad) to disappoint you. Our entire block of several hundred thousand roses has been sold.

Mountain View Floral Nurseries
Troutdale, Oregon
Leading Growers Since 1900

California Field-grown
ROSEBUSHES
Dependable
Howard Rose Co.
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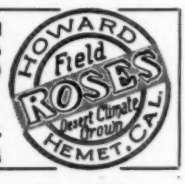

Ontario, vice-president; Kenneth Bishop, of Bishop & Mathews, Los Angeles, treasurer, and Alfred W. Roberts, secretary, were introduced. New offices for the organization will be located at 4541 Lomita street, Los Angeles.

Dr. Gustav Mehlquist, professor of floriculture at U. C. L. A., outlined the proposed program at the university for the study of ornamental horticulture and floriculture. Under this plan, it is believed that considerable progress and improvement will be made.

Fred Roewekamp, landscape engineer for the division of forestry of the Los Angeles park department, spoke on the newer kinds of trees available for parkway planting in the county.

CALIFORNIA NOTES.

The Superior California Nurserymen's Association postponed its August meeting until September 10. This will be the last meeting before the members go to the annual convention of the California Nurserymen's Association, to be held at Long Beach, September 24 to 27.

Members of the Superior California Nurserymen's Association will be hosts on floriculture day, September 3, at the state fair at Sacramento, to visiting nurserymen and to the State Federation of Women's Garden Clubs, which will hold its annual convention at Sacramento at that time.

WASHINGTON NOTES.

R. A. Pearce, State Flower Nursery, Bothell, is erecting a new greenhouse for Mrs. Pearce to grow orchids.

Fred De Sellum, former president of the Washington State Horticultural Association and who has been engaged in horticultural pursuits for over twenty years, has been appointed supervisor of horticulture for the state of Washington.

RECENTLY inducted into military service, Joseph P. Houlihan, Jr., son of J. P. Houlihan, of the Houlihan Nursery at Creve Coeur, Mo., made high rating in the preliminary examinations and was sent to Fort Bragg, in North Carolina, where he is with the signal corps.

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Quality Stock
While we nurserymen cannot use our equipment and labor to manufacture defense weapons, we can do our part in the emergency program by maintaining the public's interest in their trees and gardens as a relief from wartime worries and by urging fruit tree planting as a health measure.
CONIFERS AND BROAD-LEAVED EVERGREENS
SHADE AND FLOWERING TREES
FRUIT TREE SEEDLINGS
FRUIT TREES
DECIDUOUS SHRUBS
VINES AND BULBS
PORTLAND ROSES
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FAIRVIEW, OREGON
Wholesale Only
GOOD WESTERN-GROWN NURSERY STOCK
Fruit Tree Seedlings
Flowering Ornamental Trees
Shade Trees
Roses
Grown right and packed right.
Combination carloads to Eastern distributing points will save you on freight.

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MILTON-*Since 1878*-OREGON
GENERAL NURSERY STOCK
Specializing in
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Send us your Want List. Our catalogue sent on request.
Combination carloads available to Eastern distributing points at minimum freight cost.

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Wholesale Rose Growers
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With the memory of last year's shortages still fresh in mind, and the probability that stock will be more in demand next year, protect your business by ordering now for delivery next season.
Maples — Birch — Hawthorn — Chinese Elm—Bechtel's Crab—Flowering Cherry—Weeping Cherry—Weeping European Aspen—Laburnum Vossii —Laburnum Adami.
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Large assortment of fine imported and domestic varieties of fruit trees.
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WHOLESALE GROWERS
Fruit, Shade, Flowering Ornamental Trees, Fruit-tree Seedlings, Roses, Etc.
Very complete line of quality stock
Catalogue sent on request.

Association Outings

OUTING AT PAINESVILLE.

With members of the Lake County Nurserymen's Association as hosts, the Ohio Nurserymen's Association held a banner summer meeting at Painesville, August 21. The Parmly hotel was filled to overflowing, and local nurserymen found places in their homes or in other quarters for many visitors.

So many appeared for the trip through the big factory of the Industrial Rayon Corp. in the morning that, although more than the usual limit were admitted, a second tour was provided for others in the afternoon. The trip through the factory to see how thread of silklike rayon is manufactured by tons daily from cellulose, received in sheets like white blotting paper, made from spruce logs in Canada, was most interesting.

On the way, the visitors drove through the larger part of the fields of Storrs & Harrison, Inc., and evidence of real progress was seen in cleaning up, cultivating and replanting under the new management. Ned Ramsey and W. A. Cole were energetic in looking after the guests' guidance.

At Painesville township park a buffet luncheon of fresh perch was served to well over 100 persons. The Ohio Nurserymen's Association held a short business session, John D. Siebenthaler presiding. Secretary Roger Champion read the minutes of the preceding summer's meeting, and Louis Bookwalter and Howard J. Burton reported for the Ohio delegates on the A. A. N. convention cruise in July. That state had the largest representation on board, and the blue neckties with yellow dots the men received as prizes were worn at the banquet that evening. F. R. Kilner, editor of the American Nurseryman, was called upon and told of plans already discussed by A. A. N. officers to make the program at the Kansas City convention, next July, of live interest by means of panel and group discussions, with members participating, to take the place of sessions of committee reports. Mr. Siebenthaler said other speakers would be heard at the banquet, but the festal occasion in the evening passed by without opportunity for speechmaking or for Ed Jenkins to show his pictures of the convention cruise.

During the afternoon, parties were taken out on a steam yacht, and a few energetic young fellows indulged in a softball game.

In the evening about 225 sat down to dinner at the Madison Golf Lakelands Country Club and enjoyed dancing afterward.

Arrangements were made with a thoroughness that insured an enjoyable time for everybody, and much praise was given the arrangements committee, composed of Roger Champion, Melvin Wyant, Joseph Martin, Sr.; William Youmans, president of the Lake County Nurserymen's Association, and Alex Zebehazey, whose prowess as a seller of banquet tickets is well established.

The county fair was in progress that week, and members of the Lake County Nurserymen's Association were responsible for garden displays and a setting for the garden club and other amateur flower exhibits that made this feature of the fair one of the most prominent and popular.

MASSACHUSETTS OUTING.

The Massachusetts Nurserymen's Association held an enjoyable field day at Corliss Bros.' Ipswich nursery, August 7.

After inspection of this modern, unusually well kept nursery, thirty-three motored over to Essex, where a sumptuous shore dinner was enjoyed.

After dinner, the members and their friends adjourned to the park near by, where a few engaged in a duel of horseshoes. About twenty of the others, under the guidance of Captain Jim Geehan and Captain George Rose, engaged in a softball game. Captain Geehan's team was doing all right for itself until the opposing pitcher singed his whiskers with a fast ball. However, the captain had the true spirit because he stood right up to the plate and knocked the next pitch through the box for a two-bagger. Arno Nehrling thereupon appeared on the scene and through his Herculean efforts as a relief pitcher, the final score, tabulated after much addition and subtraction, was 0 to 0.

Joe Lane and Ralph Larson were present, but had had so much lobster it was impossible to get them off the ground for the softball game.

L. A. Hathaway, Sec'y.

MARYLAND MEETING.

The summer meeting of the Maryland Association of Nurserymen assembled at 1 p. m., August 20, at the offices of Towson Nurseries, Inc., Towson, Md. After calling the group together, President Dan Shipley introduced the host to the meeting, W. C. Price, president of Towson Nurseries. The seventy and more guests were taken in cars to see the four branch nurseries, all situated in Baltimore county, where 600 acres of fine specimen nursery stock is grown. This nursery, one of the largest of its kind in the east, is also one of the most attractive, being beautifully arranged and well kept at all times.

START A Scott Lawn THIS FALL
..Have Beautiful Turf For Years to Come
Scotts TURF BUILDER
SOW Scotts FOR A WEEDFREE LAWN
● Nature seeds in the fall - - it's the best time. Ray Collier of Williamsville, N. Y., says: "I planted Scotts Seed on September 1 and a wonderful turf resulted with scarcely a weed .. by October 28 the grass had been cut three times. Mrs. M. F. Cramer of Worthington, Minn., tells us, "Last fall our yard was sown with Scotts . . . in 10 days we had a carpet of beautiful turf. Hundreds of people stop to look at our lawn." Start your Scott Lawn today or convert your present lawn to a Scott Lawn . . . Full directions upon request - - no charge or obligation.
O. M. SCOTT & SONS COMPANY
185 Main St., Marysville, O.
Lawn Care
FREE
Lawn Care BULLETINS
Issued 5 times yearly tell how to combat weeds and how to have a lawn of lasting beauty. Write today for edition on fall seeding.

WHILE YOU ARE THINKING ABOUT

mailing a circular or special list to move surplus stock in time, an advertisement in the

AMERICAN NURSERYMAN

would carry your offer to trade buyers quickly and at less cost—and you may be sure it will be seen and read.

One-cent postage would cost $45 to reach our 4,500 readers.

But a full-page ad costs but $60; one-half page, $30; other spaces in proportion.

Note how others use this means to turn their stock into cash.

Now is the time for action!

Forms for September 15 Issue Will Close September 10.

PEACH PITS
Our Pits Compare Favorably With the Best
HOGANSVILLE NURSERIES
HOGANSVILLE, GEORGIA

Write for prices on
OZARK NATURAL PEACH PITS
Gathered from the Ozark and Cherokee Hills. Seeds are screened and run 7,000 or more to the bushel. Send us your wholesale list.
The Claremore Nurseries
Claremore, Okla.

Between the offices and Mr. Price's home is a beautiful display garden with many large azaleas. It is said that literally thousands of cars come out from Baltimore bringing visitors when the plants are in bloom. Without doubt it would pay every retail nurseryman to have a similar type of display garden, even if it was only a miniature edition.

The entire afternoon was required to see these nurseries. Upon return to the offices, the guests assembled near a log cabin under trees beside the display gardens. There Towson Nurseries served a delicious supper, accompanied by music on an accordion played by one of the girls in the office. After the supper there were a short business meeting and some enjoyable talks, with some mint juleps adding to the pleasant time.

President Shipley asked Mr. Price to act as toastmaster. He, in turn, called on Dr. H. C. Byrd, president of the University of Maryland, who pledged his support to the new arboretum.

Frank S. LaBar, newly elected vice-president of the A. A. N., was introduced. Mr. LaBar stressed the value of the A. A. N. to all nurserymen and chided the Maryland nurserymen on their relatively poor membership in the association. Mr. LaBar was sufficiently good salesman to encourage applications for membership before the evening was over of enough volume to give Maryland a delegate.

Henry Hohman, chairman of the arboretum committee, announced that after ten years of effort a start was finally being made on the arboretum at College Park.

The second day, the association was entertained by J. E. Stoner, of the Westminster Nurseries, and "Patsy" Donofrio, of the D. & C. Hardy Plant Nursery. The first part of the day was spent with Mr. Stoner in going over his large acreage of ornamentals and fruits and wealth of young material. On the way demonstrations were made of his many mechanical devices for cultivating and digging, and then came an interesting showing of his fine live stock used about the nursery. Much time was spent at the greenhouses in looking over a large collection of fine potted material being made ready for

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SEEDS PLANTS BULBS
SINCE 1838 PHILADELPHIA

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North Dakota and Montana Seeds
1941 crop available soon

Pseudotsuga Douglasii (E. Mont.)
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Deciduous tree, shrub and wild flower seeds and crude botanicals.

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LAWN GRASS SEED
HIGHEST QUALITY

	Bag	100 lbs.
Velvet Lawn Mixture	112 lbs.	$18.50
Kentucky Bluegrass, extra	112 lbs.	19.00
Redtop, fancy silver seed	100 lbs.	12.00
American Rye Grass	100 lbs.	7.00
Perennial Rye Grass	100 lbs.	14.50

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MICHIGAN PEAT MOSS

America's Top Quality Peat for 25 years! Used by our best growers and nurserymen. Economical. Reliable. Order *genuine* Michigan Peat today. Only 90c per 100-lb. bag, in 20-bag lots; or $1.25 per bag, single bag. F.O.B. plant. 100-lb. bag contains 5 bushels. Compare! Excellent in all nursery work!

American Soil Sponge Selling Corp.
267 Fifth Ave., New York—Capac, Mich.

AMERICAN ELMS

	Per 100		Per 100
6 to 8 ft.	$40.00	2 to 2½ ins.	$90.00
8 to 10 ft.	50.00	2½ to 3 ins.	135.00
1½ to 2 ins.	65.00		

35,000 trees must go this fall.
Richton Park Nursery Co. **Richton Park, Ill.**
5 miles west of Chicago Heights.

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Let these little liners move your stock easily and cheaply.

Peonies: Tree and Herbaceous, best varieties. Oberlin Peony Gardens, Sinking Spring, Pa.

Peonies, cut flower varieties. Send for list. Littleford Nurseries, Downers Grove, Ill.

120 acre nursery. Est. 45 yrs. 35,000 mailing list. LaFrance Fruit & Plant Farm, Holton, Kan.

Hemlock transplants, strong rooted. Write for prices. Twin Cedar Nursery, Williamsburg, Mass.

4000 Sugar Maples, 1 to 15 ft.
Bargain price quoted on request.
Sylvan Crest Gardens, Port Matilda, Pa.

Specimen White, Norway and Colorado Blue Spruces. No boxing. Truck only.
The Evergreen Nurseries, Lowell, Ind.

3000 NORWAY MAPLE.
2½-in. and up in caliper being offered at a bargain. Quoted on request.
WAYNESBORO NURS., WAYNESBORO, VA.

GRAFTED THOMAS BLACK WALNUT.
Select Black Walnut and White Oak Seedlings. Write for prices.
NUT TREE NURSERIES,
John W. Hershey, Owner, Downingtown, Pa.

Pansy Plants. Improved Swiss Giants.
Strong, stocky plants from a choice, selected strain, $3.50 per 1000.
Thomas J. Fowler, Stratton Road, Williamstown, Mass.

FOR SALE.
10,000 slightly used 2x2½-inch rose pots, ideal for potting up grafting stock, etc., $8.50 per 1000, any quantity. Careful packing. Satisfaction guaranteed. Cash, please.
FRITCHARD NURSERIES, OTTAWA, KAN.

SPECIMEN APPLE TREES.
Grown for shade and ornamental purposes in assorted varieties. 7 to 8 ft., 1¼ to 1½-in. caliper, $7.50 per 10, $65.00 per 100; 1½ to 2-in. caliper, $10.00 per 10, $90.00 per 100. 4 to 5-in. caliper, B&B, trees quoted on request.
WAYNESBORO NURSERIES,
Waynesboro, Va.

NEW DAYLILIES.
(Hemerocallis.)
Dr. Stout's Hybrids exclusively. New colors, new types, new seasons. Get to know them and the possibilities for your trade by writing for our catalogue and trade list.
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Lilium Candidum.
Daffodil bulbs.
Muscari, Heavenly Blue.
Hemerocallis.
Peonies.

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4,500 Nurserymen

will see your **Want List** or your prices on **Long Items** if you list them in the

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lining out under the supervision of expert propagators.

Mr. Stoner and Mr. Donofrio entertained the guests at luncheon at the Charles Carroll hotel, at Westminster. The president introduced the speakers: J. P. Wantz, president of the chamber of commerce, who outlined the history and merits of Westminster and Carroll county; Dr. Fred G. Halloway, president of Western Maryland College, who spoke of its small arboretum of indigenous material on the college campus; Dr. T. B. Symons, of the University of Maryland, who spoke at length on what might be expected in the future for the nursery industry, and Dr. E. N. Cory, also of the university, who told of the effectiveness of the milky white bacterial disease for combating the Japanese beetle.

The afternoon was spent at the D. & C. Hardy Plant Nursery, Westminster. Mr. Donofrio, who is a recognized authority on the propagation of herbaceous material, took the members on a tour through his well laid out display of perennials, roses, pool and rock gardens, located to great advantage along the Baltimore pike. Much time was then spent in the nursery in looking over one of the finest collections of up-to-the-minute herbaceous plants in the east. After iced refreshments, the meeting came to a close with all members leaving much profited from the two days of association.

JAP BEETLE QUARANTINE.

It has been found by the federal bureau of entomology and plant quarantine, as a result of additional experiments with treatments for freeing nursery stock and potted plants from the immature stages of the Japanese beetle, that the methyl bromide fumigation treatments may be further modified. Accordingly, revised instructions issued August 6 provide for a temperature of 67 degrees Fahrenheit, instead of 70 degrees as heretofore, for the 2½-hour treatment with a 2-pound dosage, and for 73 degrees under a 2½-hour treatment with a 1½-pound dosage. The diameter of the soil balls in all treatments is placed at a maximum of fourteen inches, instead of twelve inches as heretofore.

FOR SALE

Established Lily Business.

Ten acres sandy loam; 6 acres irrigated with Skinner overhead system, all automatic, with Bonneville power. Excellent for all bulbs and nursery stock. Modern living quarters, large storage space. Close to town, grade and high schools. Modest capital will handle. Ill health forces owner to sell. Julia E. Clark, R. 1, Box 328, Canby, Ore.

FOR SALE

Nursery, growing evergreens, shrubs, shade and ornamental trees; fruit trees, fruit plants, nut trees, etc. 113 acres, well located near five thriving cities in good farming and industrial section of one of the south Atlantic states.

Address No. 205, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

FOR SALE

Well stocked nursery, approximately 23 acres; near Chicago. One of the North Shore's finest nurseries. Failing health is reason for selling. Address No. 202, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

HELP WANTED

LANDSCAPE SALESMAN.

An aggressive go-getter who knows how to sell and what to sell. If you know stock, some of the answers, something of soils and spraying and possibly can draw a fair plan, you can go far with us and make good money. We are an old and well established nursery with a good reputation and rating. Compensation to start, small salary and commission. Send photograph, qualifications, age and full information in first letter. Address No. 207, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

HELP WANTED

Salesman with knowledge of landscaping wanted by established landscape specialists in western city. Must have a car. Salary and commission. Send qualifications, age, salary to start, photo and samples of work. Address No. 198, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

HELP WANTED

Nurseryman, landscape man, one not afraid to work around greenhouse and nursery. Commissions and $18.00 per week to start.

Address No. 203, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

HELP WANTED

Landscape and Nursery salesman by well established nursery. Must have car. Very liberal commission basis. Permanent, with opportunity of small investment if desired.

United Landscape Service,
3741 S. Peoria Tulsa, Okla.

WANTED

Philadelphia advertiser wants nursery connections to fill orders under private brand. Must be well stocked with all popular varieties. Please forward proposal for working arrangement. Address No. 206, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

SOUTHWESTERN NEWS.

The annual field day of the Nebraska Association of Nurserymen is to be held at Omaha, September 9, at the Omaha branch of Marshall's Nurseries, Eighty-fourth and Center Street road.

Mr. and Mrs. Folkner, of the South Santa Fe Nursery, Denver, Colo., made a business trip to Missouri in the fore part of September.

Knudsen's, Inc., is the new name for what was formerly known as the Boulder Greenhouse, Boulder, Colo. A line of nursery stock has been added to the flower business.

Marshall's Nurseries, Arlington, Neb., have opened a branch at Denver, Colo., where they are constructing a concrete and tile office and storage building. Maurice Marshall is in charge of this branch. The company continues to operate its branch at Omaha, which was established many years ago.

C. D. "Bill" Wagoner, of the Wagoner Nursery, Hutchinson, Kan., spent the month of August vacationing in Canada, with his family.

Mrs. H. J. Hansen, owner of Hansen's Nursery, Wichita, Kan., and her daughter, Enas Marie, spent several weeks on the Pacific coast, returning the middle of August.

Paul Wilkinson, Fay Pullen and Max Clark, all of the Henry Field Seed & Nursery Co., Shenandoah, Ia., left August 18 for a trip of about a week to be spent in visiting nurseries in the south.

The Henry Field Seed & Nursery Co. recently leased a 30-acre tract on West Dodge, Omaha, Neb., which was occupied last season by the Baldwin-Wycoff Rose Co. An office and a greenhouse are on the grounds. It is planned to use the place for a cash-and-carry nursery business, with possibly some landscape work.

Ralph Ricklefs, of the Kansas Landscape & Nursery Co., Salina, Kan., was in charge of the flower show at the 4H fair at Salina during the week of August 25. Mr. Ricklefs enjoyed a vacation in Minnesota this year.

C. Burton Fox, Springfield, Mo., has been engaged to draw plans for landscaping the 100-acre grounds of the new O'Reilly general hospital of the War Department, to be planted in autumn.

Henry Koch, of the Rainbow Nursery, on U. S. highway 50, east of Kansas City, Mo., formerly operated a nursery under the same name at Kansas City, Kan.

Levi M. Roller is giving up the nursery at Seligman, Mo., to establish a fruit market at Independence, Mo.

Les Sjulin and son Ted and E. H. Balco, of the Interstate Nursery, Hamburg, Ia., made a trip to Oklahoma during July, visiting several nurseries en route.

Oscar H. Schmidt, St. Joseph, Mo., won the contract for a roadside improvement project in Cherokee and

FEED LAWNS WITH AGRICO
— NOW —

GRASS grows best from Labor Day until heavy frost. For best results, use the fertilizer that's specially formulated for lawns — AGRICO FOR LAWNS, TREES and SHRUBS. Get quick, strong, deep-rooted growth to carry through winter and start fast in early spring. Use Agrico and have a lawn to be proud of. For bulbs and flowers, use AGRICO FOR GARDENS.

Get the most for your money — use these special-purpose plant foods. Backed by over 80 years' experience, Agrico is made ONLY by The American Agricultural Chemical Company, one of the world's largest fertilizer producers.

AGRICO — THE NATION'S LEADING FERTILIZER

WRITE FOR 10-DAY TRIAL OFFER on this High Pressure PARAGON SPRAYER

TEST it for yourself. Compare results with what you have been getting from your present sprayer. Use any spray solution or cold water paint. Spray your nursery stock, whitewash your greenhouses, barns and tool sheds, inside and out. Note how easily this Paragon delivers powerful uniform pressure at the nozzle with little effort at the pump handle. Passes through narrowest aisles without jamming at corners. Automatic agitator prevents solution from settling. We guarantee it never to clog while in use. Ten days trial costs you nothing if not satisfied. If your dealer does not sell the Paragon, mail the coupon today.

Paragon No. 3 7½-ft. pipe 10-ft. hose 3 nozzles

1 or 2 wheel truck

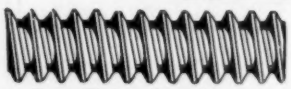
The Campbell - Hausfeld Company
903 State Ave.
Harrison, Ohio

Send prices and details as per advertisement in American Nurseryman for September 1.

Name ..... Post Office .....

Street ..... State .....

SUPPLIES — TOOLS



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AMERICAN FLORIST SUPPLY
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A few bales left. Write for present prices.
GOODRICH RUBBER BUDDING STRIPS
Factory working solely on Defense orders. No more strips will be made this year. Small supply remains on hand. Order at once or be disappointed.
THOMAS B. MEEHAN CO.
Dresher, Pa.

TREE WOUND DRESSING

For destroying and preventing the growth of wood destroying fungi and for the protection of wounds, use Bartlett Tree Paint. Easily applied with ordinary paint brush. Non-injurious to cambium layer.
Used by U.S. Government, State Highway Departments, Tree Experts, Parks and Cemeteries.
$1.50 Gal. can
$5.50 5-Gal. Drum
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WRITE FOR INFORMATION ON NURSERY HAND TRUCK, EVERGREEN CARRIERS AND AUTOMOTIVE TREE MOVING EQUIPMENT.
THE GARDEN SHOP, INC.
4819 MISSION ROAD
KANSAS CITY, KANS.

Use The Best Twines
JUTE · JAVA
SISAL · COTTON
You have so many uses for twine around the nursery every day that the economical thing to do is to buy the best and strongest obtainable. The Geo. B. Carpenter Co. can supply you. Send sample or description for prices and ask for **free** booklet—"Knots the Sailors Use."
GEO·B·CARPENTER & Co.
CHICAGO ILLINOIS

Crawford counties, Kan., with a low bid of $2,867.

The low bid of $11,284 for a roadside improvement project in Labette and Neosho counties, Kan., was submitted by Sutton Nursery & Landscape Co., Independence, Kan.

Mr. and Mrs. Leroy H. McCoy, of McCoy's Greenhouse & Nursery, Kansas City, Mo., are rejoicing in the birtn of a daughter. Their 10-year-old daughter, who was badly burned on the first day of March, is now at home recovered except for scars on her arms and body from her ordeal. Her recovery took many weeks, as it was complicated by lockjaw and gas gangrene.

GALL INSECTS ON OAKS.

Some of the white oaks in the vicinity of New York city and probably in other localities had a considerable proportion of the upper branches with few or no leaves in late May. There were small brown nut-like objects on the tips of the twigs. These were the dead remains of leaflets killed as they were pushing out of the bud by tiny gall insects only about one-twentieth of an inch long, reports Dr. E. Porter Felt, of the Bartlett tree research laboratories, Stamford, Conn.

Some oaks were so badly infested that one-fourth to approximately one-half of the upper branches had few or no leaves. This was true of large trees with a trunk diameter of nearly two feet and a height of from sixty to seventy feet. The killing of the leaves in the buds is nearly as injurious to a tree as the stripping of the foliage after it is nearly out. Both weaken the tree and compel the production of a second crop of leaves if the affected trees are to make any growth. The reduction in vitality also produces conditions favorable to invasion by borers.

A large number, nearly 800 species, of gall insects attack oaks in this country. Fortunately, most of them are comparatively harmless and only a few occur in such numbers as seriously to affect a considerable proportion of the leaves. Probably this little gall wasp, known as Neuroterus minutus, can be controlled with a contact insecticide applied just as the young leaves are pushing out of the bud. Unfortunately, it is difficult to anticipate such a general infestation as the one briefly described above.

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for Nurserymen

Book A. Illustrates in full color 235 standard nursery items, brief description, substantially bound. Price in small lots, 65c each.

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Descriptive Nursery Catalogue
Nicely illustrated, 48 pages and cover. 15c each in small lots.

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The American
TILLAGE COMBINE
3 MODELS TO FIT EVERY NEED
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Write for FREE Catalog!

Nursery Spades, Knives and Pruning Shears, Budding and Grafting Supplies, Tree Surgery and Lawn Equipment.
96 page catalogue free—write,
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Those PLANT BANDS

Showing sizes carried with bottoms: 4x4x4, 4x4x6, 6x6x6. Also carried in 6x6x4, 6x6x9 and 6x7x3 —last of which is carried for retail sales with a dozen 1¾-inch bands.

Ideal for planting up your roses, evergreens and so forth, and have them ready for lining out. Also for taking up field-grown perennials for local sales. This will call for various sizes.

This method keeps the roots in good shape and eliminates the expense of balling and burlap, especially in the case of evergreens. Many other uses will suggest themselves to the wide-awake nurseryman at this season of the year.

Geo. J. Ball INC.
WEST CHICAGO, ILLINOIS, U. S. A.
"Flower Seeds for Nurserymen"
Send for Catalogue

NOTE!

Because of the use by defense industries of the material from which these bands are made, a slight price advance is necessary. In spite of this advance, a part of which we are absorbing, you will find "Those PLANT BANDS" economical to use.

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Prices given are F.O.B. our Warehouse West Chicago

		Wt. per 1000
1¾x1¾x2½		
500	$1.40	
1000	2.60	19 lbs.
2x2x3		
500	$1.55	
1000	2.90	24 lbs.
2½x2½x3		
500	$1.60	
1000	3.10	33 lbs.
3x3x3		
500	$1.95	
1000	3.70	38 lbs.
3x3x4		
500	$2.25	
1000	4.30	44 lbs.
4x4x3		
500	$2.10	
1000	3.95	45 lbs.
4x4x4		
500	$2.65	
1000	5.10	63 lbs.
3x3x6		
500	$3.15	
1000	6.15	66 lbs.
4x4x6		
500	$3.65	
1000	7.20	82 lbs.
6x6x6		
500	$6.05	
1000	11.90	98 lbs.
6x6x9		
500	$9.60	
1000	18.95	250 lbs.
With Bottoms		
4x4x4		
500	$3.75	
1000	7.30	72 lbs.
4x4x6		
500	$5.40	
1000	10.65	112 lbs.
6x6x4		
500	$7.70	
1000	15.25	160 lbs.
6x6x6		
500	$9.75	
1000	19.30	180 lbs.
6x6x9		
500	$13.20	
1000	26.15	350 lbs.
6x7x3		
500	$5.50	
1000	10.80	155 lbs.

Quantity discount of 5% is allowed on orders of 25,000 made up of various sizes. If interested in larger quantities write us.

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The Illco Fog Sprinkler is a portable, flexible and fully adjustable sprinkling system for all kinds of lawns and gardens of every size. The fine mist produced by the especially designed spray head becomes warm and aerated before it settles to the ground like a heavy dew. With a slight breeze this fog is blown for many feet.

ADJUSTABLE SPRAY HEAD

Each head can be placed in the lawn in any position or angle by means of a pointed brass rod 4 ins. long and can be quickly and easily changed. The spray head is all bronze, and the hose is heavy braided construction for long life. There is 8 ft. of hose between each head.

ORDER NOW

Mail your order today. Ordinary city pressure will accommodate ten or more heads from each supply line.

ILLCO FOG SPRINKLER

Four Head System with 25' hose (15 lbs.)..... $7.75
Six Head System with 41' hose (20 lbs.)..... 11.45
Eight Head System with 57' hose (32 lbs.)..... 15.40
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Books especially valuable for color illustrations

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AMERICAN NURSERYMAN

508 S. Dearborn St. CHICAGO

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HEMLOCKS — Forest seedlings treated with TRANSPLANTONE —losses less than 5 per cent against losses up to 80 per cent without treatment. Three years of tests—reports from dozens of users.

PIN OAK AND SWEET GUM —Several nurseries report less than 1 per cent loss of treated trees this spring against 25 per cent loss without treatment under the same conditions. Tests were made on hundreds of trees.

Pine Tree Ready for Transplanting

ALPINE PLANTS AND WILD FLOWERS—Especially the wild orchid (cypripediums) and arbutus (Epigæa repens) show marked stimulation to this treatment.

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TREE PEONIES—Seedlings show many times faster growth and better resistance to damping-off after treatment.

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NURSERYMEN!

For woody cuttings, where you want a faster working powder, use ROOTONE No. 10—a stronger concentration than regular ROOTONE. Especially suited to azaleas. Two ounce jar, **$2.00**—one pound can, **$10.00.** Write today for our proposition to nurserymen.

Can you afford to pass up TRANSPLANTONE in your nursery practice?

One pound can, $4.00— makes 160 to 1600 gallons of solution for transplanting.

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